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ABSTRACT

The general purpose of the occupational analysis is to provide workable, basic information dealing with the many and varied duties performed in the dental assistant occupation. The document opens with a brief introduction followed by a job description. The bulk of the document is presented in table form. Six duties are broken down into a number of tasks and for each task a table is presented, showing: tools, equipment, materials, objects acted upon; performance knowledge; safety--hazard; science; math--number systems; and communications. The duties include: performing dental nursing skills, chairside procedures, expanded duty procedures, dental laboratory skills, and dental office management duties; and supervising a control program. (BP)

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Occupational Analysis

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DENTAL ASSISTANT

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Instructional Materials Laboratory
Trade and Industrial Education
The Ohio State University

5120

AN ANALYSIS OF THE DENTAL ASSISTING OCCUPATION

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FOREWORD

The occupational analysis project was conducted by The Instructional Materials Laboratory, Trade and Industrial Education, The Ohio State University in conjunction with the State Department of Education, Division of Vocational Education pursuant to a grant from the U.S. Office of Education.

The Occupational Analysis project was proposed and conducted to train vocational educators in the techniques of making a comprehensive occupational analysis. Instructors were selected from Agriculture, Business, Distributive, Home Economics, and Trade and Industrial Education to gain experience in developing analysis documents for sixty-one different occupations. Representatives from Business, Industry, Medicine, and Education were involved with the vocational instructors in conducting the analysis process.

The project was conducted in three phases. Phase one involved the planning and development of the project strategies. The analysis process was based on sound principles of learning and behavior. Phase two was the identification, selection and orientation of all participants. The training and workshop sessions constituted the third phase. Two-week workshops were held during which teams of vocational instructors conducted an analysis of the occupations in which they had employment experience. The instructors were assisted by both occupational consultants and subject matter specialists.

The project resulted in producing one hundred two trained vocational instructors capable of condulting and assisting in a comprehensive analysis of various occupations. Occupational analysis data were generated for sixty-one occupations. The analysis inlcuded a statement of the various tasks performed in each occupation. For each task the following items were identified: tools and equipment; procedural knowledge; safety knowledge; concepts and skills of mathematics, science and communication needed for successful performance in the occupation. The analysis data provided a basis for generating instructional materials, course outlines, student performance objectives, criterion measures, as well as identifying specific supporting skills and knowledge in the academic subject areas.

PREFACE

The purpose of this document is to provide a reference for the development of vocational programs of instruction. The contents of the book covers the major duties and tasks performed by dental assistants in Ohio. Each task has been analyzed to identify specific skills and knowledge essential for accurate and efficient performance of the task. The level of specificity and detail of the analysis process was modified in order to accommodate the time frame and total scope of information to provided. The participants were involved in an intensive process of inquiry, organization, and definition utilizing both professional consultants and written resources.

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JOB DESCRIPTION

The dental assistant serves the dental profession as an extension of the practitioner enabling the dentist to do only those duties requiring his/her advanced knowledge and skills.

The dental assistant, in order to become a qualified member of the dental team, must be knowedgeable in the complexities of the interrelated subjects associated with dentistry.

The dental assistant must have knowledge and skill as a chairside assistant, as an executive secretary in practice management, as a dental laboratory assistant, a dental nurse, a control therapist and as an expanded duty assistant.

Duty A Performing Dental Nursing Skills

1 Take and record a blood pressure
2 Take a patient's pulse
3 Take a respiratory reading
4 Take an oral temperature
5 Aid a patient for foreign objects in the throat
6 Aid a patient for hemorrage
7 Aid a patient for convulsions
8 Aid a snycopé patient
9 Aid a patient in shock
10 Aid a patient for cardiac arrest
11 Complete inventory of drug supply
12 Dispense medication to a patient
13 Write a prescription under order

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
BLOOD PRESSURE CUFF STETHESCOPE PATIENT	POSITION AND PREPARE PATIENT PLACE BLOOD PRESSURE CUFF PLACE STETHESCOPE CONE TAKE READING AND RECORD DECISION SELECTING CORRECT SIZED BLOOD PRESSURE CUFF ACCURATE READING FAILURE MODE UNAWARENESS OF OSCULATORY GAP ALLOWING PATIENT TO BECOME ALARMED, CAUSING RISE IN BLOOD PRESSURE–INACCURATE READING	PROLONGED CUFF PRESSURE HAZARD IMPAIRS CIRCULATION
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
CIRCULATORY SYSTEM (RUDIMENTARY KNOWLEDGE) FLUIDS UNDER PRESSURE (Examples: INCOMPRESSIBILITY, TRANSFER OF PRESSURE) SYSTOLIC AND DIASTOLIC PRESSURE SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE	READ AND INTERPRET CHARTS, TABLES, AND/OR CHARTS MEASURE WITH THE METRIC AND ENGLISH SYSTEM AND CONVERT BETWEEN THEM	WRITING–RECORD SPEAKING–GIVING ORDERS, REASSURE PATIENT READING–INSTRUMENT SPHYGMOMANOMETER

(TASK STATEMENT) TAKE A PATIENT'S PULSE

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
WATCH WITH SECOND HAND PATIENT	POSITION PATIENT APPLY INDEX FINDERS (2) TO RADIAL AREA IN WRIST DECISION PLACING FINGERS AT PROPER PRESSURE POINT FAILURE MODE INACCURATE READING–USING THUMB ALARMING PATIENT CAUSING RAPID PULSE	ASSISTANT USING OWN THUMB TO CHECK PULSE HAZARD: OBTAIN INCORRECT PULSE
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
CIRCULATORY SYSTEM–PRESSURE POINTS ARTERIAL PRESSURE	LOCATE BY APPROXIMATION RATIONAL NUMBERS AND INTEGERS ON THE NUMBER LINE (SEQUENTIAL ORDERING) MULTIPLICATION AND DIVISION WITH WHOLE NUMBERS	READ INSTRUMENT (WATCH WITH SECOND HAND) SPEAKING–GIVING ORDERS, REASSURING PATIENT WRITING–RECORD PULSE

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(TASK STATEMENT) TAKE A RESPIRATORY READING

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
PATIENT WATCH, SECOND HAND	OBSERVE PATIENT AT A TIME WHEN HE/SHE IS NOT AWARE DECISION WHEN TO TAKE COUNT FAILURE MODE INACCURATE COUNT IF PATIENT BECOMES AWARE	

SCIENCE	MATH – NUMBER SYSTEMS	COMMUNICATIONS
RESPIRATORY SYSTEM UNDERSTAND PULSE	LOCATE BY APPROXIMATION RATIONAL NUMBERS AND INTEGERS ON THE NUMBER LINE (SEQUENTIAL ORDERING)	INSTRUCTING VERBALLY WRITING–RECORD

(TASK STATEMENT) TAKE AN ORAL TEMPERATURE

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
ORAL THERMOMETER ALCOHOL GAUZE, 2 x 2 SPONGE PATIENT TIME PIECE	INSTRUCT PATIENT PLACE THE THERMOMETER TAKE READING RECORD DECISION - LENGTH OF TIME FAILURE MODE INACCURATE READING DUE TO INSUFFICIENT TIME OR PREPARATION	BROKEN THERMOMETER → HAZARD LACERATION TO PATIENT MERCURY REACTION TO PATIENT
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
EFFECT OF HEATING AND COOLING ON EXPANSION OF MATERIALS (CHANGE OF DIMENSIONS) EXPANSION OF HEATED FLUID ORAL CAVITY ANATOMY TRANSFER OF ENERGY FROM ONE FORM TO ANOTHER	READ AND INTERPRET CHARTS, TABLES, AND/OR GRAPHS LOCATE BY APPROXIMATION RATIONAL NUMBERS AND INTEGERS ON THE NUMBER LINE (SEQUENTIAL ORDERING) MEASURES OF TEMPERATURE	WRITING–RECORD SPEAKING–GIVING ORDERS READING–INSTRUMENT (THERMOMETER)

(TASK STATEMENT) AID A PATIENT FOR FOREIGN OBJECTS IN THE THROAT

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
HIGH VELOCITY EVACUATOR HEMOSTAT	REMAIN CALM APPLY EVACUATOR OR HEMOSTADT DECISION IF PATIENT ASPIRATES OR SWALLOWS KNOW LIMITATIONS OF OWN SKILL CUES COUGHING INABILITY TO BREATH CORRECTLY FAILURE MODE INABILITY TO RETRIEVE	FORCE USED BY OPERATION IN RETRIEVING HAZARD FOREIGN OBJECTS ASPIRATED BY PATIENT SUFFOCATION BY PATIENT

SCIENCE	MATH – NUMBER SYSTEMS	COMMUNICATIONS
ANATOMY OF ORAL CAVITY AND PHARENGIAL AREA RESPIRATION PROCESS FIRST AID SIGNIFICANCE OF VITAL SIGNS SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE.		LISTENING TO ORDERS RECORD

(TASK STATEMENT) AID A PATIENT FOR HEMORRAGE

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
PATIENT [illegible] SET-UP [illegible] ERILE GAUZE PACKS SUTURE THREAD SUTURE NEEDLE SUTURE SCISSORS NEEDLE HOLDER HEMOSTAT ORAL EVACUATOR VASOCONSTRICTOR	KNOW LIMITATIONS OF OWN SKILL DRY AREA USING EVACUATOR PLACE AND REMOVE GAUZE PACK ASSIST DOCTOR WITH SUTURING PLACE GAUZE PACK KNOW WHERE TO GET HELP DECISION DETERMINE EXACT AREA OF HEMORRAGE EXTENT OF BLOOD LOSS SHOCK FACTORS CUE CHANGE OF SKIN COLOR HEALTH HISTORY–HISTORY OF BLEEDING	EXTENSIVE LOSS OF BLOOD HAZARD: PATIENT LOSES CONSCIOUSNESS
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
CIRCULATORY SYSTEM CLOTTING PROCESS HEMOPHILLIAC CONDITION PRESSURE SPOTS BLOOD COUNTS (STUDIES) TRANSFUSIONS BLOOD PRESSURE, TEMPERATURE FLUIDS UNDER PRESSURE SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE	MEASURES OF TEMPERATURE (FLUIDS)	VERBAL–REASSURE PATIENT ORDERS FROM DOCTOR WRITING–RECORD ON PATIENT'S CHART GET PATIENT HISTORY PASS OBSERVATIONS & HISTORY TO DOCTOR

(TASK STATEMENT) AID A PATIENT FOR CONVULSIONS

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
PATIENT EMERGENCY KIT WRAPPED TONGUE BLADE	ALERT DOCTOR POSITION PATIENT PROTECT PATIENT FROM PHYSICAL INJURY FOLLOW DOCTOR'S INSTRUCTIONS OBSERVE CHARACTERISTICS OF CONVULSION REASSURE PATIENT ASSIST PATIENT IN RECOVERY STAGES DECISIONS PLACEMENT OF PATIENT OR ALL KNOWLEDGE NECESSARY TO PREVENT FURTHER HARM CUES COLOR FEELING ILL	LOWER DENTAL CHAIR HAZARD: PATIENT INJURY PREVENT PATIENT FROM CHOKING, SLIDING FROM CHAIR, BUMPING HEAD, ETC. CHECKING HEALTH HISTORY HAZARD: NOT BEING ALERTED TO PATIENT CONDITION AND AMOUNT OF MEDICATION AND TYPE TAKEN
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
NERVOUS SYSTEM MUSCLE SYSTEM EPILEPSY VITAL SIGNS–COLOR, PULSE, RESPIRATION, EYE REFLEXES		WRITING–RECORD ON PATIENT'S CHART VERBAL–REASSURE PATIENT ORDERS FROM DOCTOR

(TASK STATEMENT) AID A SNYCOPÉ PATIENT

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
OXYGEN EMERGENCY KIT BLANKET WATCH	CALL DOCTOR KNOWING LIMITATION OF OWN SKILL POSITION PATIENT–TRENDELENBURG LOOSEN CLOTHING AMMONIA AMPULE OXYGEN APPLIED TAKE PULSE COVER DECISION SEVERITY DETERMINE AMMONIA OR OXYGEN, CALL DOCTOR CUES SKIN COLOR SKIN TEMPERATURE BLOOD PRESSURE	CHAIR POSITION HAZARD: INJURY TO PATIENT OXYGEN HAZARD: IMPROPER USE OR EXPLOSION FLAME AT CHAIR SIDE

SCIENCE	MATH – NUMBER SYSTEMS	COMMUNICATIONS
APPLIED KNOWLEDGE OF CIRCULATORY SYSTEM SOME GROSS ANATOMY SIGNIFICANCE OF VITAL SIGNS APPLIED KNOWLEDGE OF NERVOUS SYSTEM APPLIED KNOWLEDGE OF RESPIRATORY SYSTEM FORCE AIR SYSTEM	SEQUENTIAL ORDERING	VERBAL–ORDERS WRITING–RECORDER WORKING FOR VERBAL RESPONSE FROM PATIENT POST-EMERGENCY–VERBAL ORDERS, DOCTOR TO PATIENT

(TASK STATEMENT) AID A PATIENT IN SHOCK

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
EMERGENCY KIT OXYGEN BLANKET	RECOGNIZE PROBLEM KNOW LIMITATION OF OWN SKILL KNOW WHERE TO OBTAIN HELP KNOW BASIC FIRST AID PROCEDURES DECISION DETERMINE USE OF AMMONIA AMPULE SEVERITY CUES CHANGES OF SKIN COLOR COLD CLAMMY SKIN SYNCOPÉ MEDICATION GIVEN	CHAIR POSITION, EMERGENCY KIT & OXYGEN HAZARD: DEATH
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
KNOWLEDGE OF VITAL SIGNS (PULSE, RESPIRATE, BODY COLOR, ETC., BLOOD PRESSURE) ADMINISTER ELEMENTARY FIRST AID		VERBAL ORDER–CALL EMERGENCY SQUAD WRITE–RECORD ON PATIENT'S CHART

(TASK STATEMENT) AID A PATIENT FOR CARDIAC ARREST

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
PATIENT EMERGENCY OXYGEN EMERGENCY KIT	DETERMINE NATURE OF EMERGENCY KNOW LIMITATION OF OWN SKILL POSITION PATIENT LOOSEN TIGHT CLOTHING OBTAIN HELP USE OF OXYGEN OR CARDIAC PULMONARY RESUSITATION DECISION JUDGE SERVERITY OF ATTACK DETERMINE USE OF OXYGEN OR CARDIAC PULMONARY RESUSITATION HOW TO ASSIST DOCTOR CUES IRREGULAR BREATHING PATIENT'S SKIN TONE VARIATION	EMERGENCY SITUATION
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
KNOWLEDGE OF CARDIAC PULMONARY RESUSITATION GROSS ANATOMY SIGNIFICANCE OF VITAL SIGNS	LOCATE BY APPROXIMATION RATIONAL NUMBERS AND INTEGERS ON THE NUMBER LINE (SEQUENTIAL ORDERING)	VERBAL ORDER–USE OF EMERGENCY TELEPHONE NUMBERS WRITTEN–RECORD ON PATIENT'S CHART

(TASK STATEMENT) COMPLETE INVENTORY OF DRUG SUPPLY

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
STANDARD OFFICE SUPPLIES STORAGE CABINET	OFFICE POLICY ON KEEPING RECORD OFFICE SECURITY RESPONSIBILITY ASSIGNED COUNT AND RECORD ON NECESSARY RECORD DECISION ACCURACY OF RECORDS SECURING STORAGE FAILURE MODE SHORT SUPPLY HAVE TO RUSH RE-ORDER	SECURITY AND RESPONSIBILITY HAZARD NOT KEEPING ACCURATE RECORDS THEFT OF NARCOTICS ALTERATION OF INVENTORY TO COVER THEFT
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
PHARMOCOLOGY RESPONSIBILITY & STANDARDS RELATED TO DRUGS	ADDITION AND SUBTRACTION OF WHOLE NUMBERS MULTIPLICATION AND DIVISION WITH WHOLE NUMBERS	NON-VERBAL–UNDERSTANDING OFFICE POLICY AS TO METHODS KNOWING WHO IS RESPONSIBLE WRITING–RECORDING AND INVENTORY

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(TASK STATEMENT) DISPENSE MEDICATION TO A PATIENT

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
MEDICATION 2 OZ. MEDICINE CONTAINER CUP & WATER PATIENT'S CHART	CHECK CHART FOR DOCTOR'S ORDERS CHECK PATIENT'S CHART FOR ALLERGIES CHECK CONTAINER MEDICATION CAME FROM FOR ACCURACY POSITION THE PATIENT GIVE MEDICATION OBSERVE PATIENT DECISION ADULT OR CHILD'S DOSAGE FAILURE MODE CONTAMINATION OF THE MEDICATION BY THE ASSISTANT DURING PREPARATION NOT KNOWING LIMITATIONS	DISPENSE INCORRECT MEDICATION HAZARD: ALLERGIC REACTION NO MEDICATION FOR PURPOSE INTENDED INCORRECT AMOUNT OF MEDICATION HAZARD: ILLNESS DELAYED RECOVERY

SCIENCE	MATH – NUMBER SYSTEMS	COMMUNICATIONS
PHARMOCOLOGY METHODS & DOSAGES IN DISPENSING MEDICATION	ADDITION AND SUBTRACTION OF WHOLE NUMBERS [IN DETERMINING A CHILD'S DOSAGE FROM ADULT DOSAGE] MULTIPLICATION AND DIVISION WITH WHOLE NUMBERS [IN DETERMINING A CHILD'S DOSAGE FROM ADULT DOSAGE] LIQUID AND DRY MEASURES (LIQUID-ELIXER, SYRUPS) LOCATE BY APPROXIMATION RATIONAL NUMBERS AND INTEGERS ON THE NUMBER LINE (SEQUENTIAL ORDERING) MEASURE WITH THE METRIC AND ENGLISH SYSTEM AND CONVERT BETWEEN THEM	VERBAL-INSTRUCTIONS TO THE PATIENT WRITTEN-RECORD ON PATIENT'S CHART NON-VERBAL-OBSERVING PATIENT'S REACTION READING COMPREHENSION-READ PATIENT'S CHART

(TASK STATEMENT) WRITE A PRESCRIPTION UNDER ORDER

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
PRESCRIPTION PAD INK PEN OR TYPEWRITER	PREPARE SUPERSCRIPTION PREPARE INSCRIPTION PREPARE SUBSCRIPTION PREPARE SIGNATURE HAVE DOCTOR COMPLETE FAILURE MODE WRITING IN PENCIL ASSISTANT SIGNING R_x	GIVE WRONG PRESCRIPTION TO PATIENT HAZARD: ILLNESS ALLERGY
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
PHARMACOLOGY DISPENSING OF DRUGS ACTION OF DRUGS ON BODY SYSTEMS	READ AND INTERPRET CHARTS, TABLES AND/OR GRAPHS, ALSO INTERPRET ABBREVIATIONS AND SYMBOLS	WRITING VERBAL - ON ORDER FROM DOCTOR READ PATIENT'S CHART FOR CORRECT MEDICATION

Duty B Supervising a Control Program

1 Conduct first session of control program
2 Conduct second session of control program
3 Conduct third session of control program
4 Conduct follow-up session

(TASK STATEMENT) CONDUCT FIRST SESSION OF CONTROL PROGRAM

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
PATIENT'S CHART PAMPHLETS TEST TUBE & SEAL SNYDER'S MEDIA FOOD DIARY FORM TOOTHBRUSH FLOSS (UNWAXED) DISCLOSING TABLETS OR SOLUTIONS BRUSHING TYPODONT AND/OR FLOSSING MODEL WALL AND/OR HAND MIRROR VANITY SINK INCUBATOR ORAL HYGIENE SLIDES & PROJECTOR	PROGRAM PRESENTATION SNYDER TEST FOOD RECORD ORAL HYGIENE–PHASE 1 ORAL HYGIENE INDEX RECOGNIZE TISSUE IMPROVEMENT DECISION DEGREE OR EXTENT OF PROGRAM GIVEN ENOUGH INCENTIVE FOR MOTIVATION CUES PATIENT'S LACK OF INTEREST ECONOMICS LACK OF DEXTERITY	NOT CHECKING HEALTH HISTORY FOR SPECIFIC DIET PROBLEM HAZARD: DETRIMENTAL TO THE PATIENT'S HEALTH
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
KNOWLEDGE OF MICROBIOLOGY METHODS OF CONTROL & MODIFICATION OF A BACTERIAL POPULATION NORMAL FLORA OF THE ORAL CAVITY MICRO-ORGANISMS ASSOCIATED WITH CERTAIN ORAL INFECTIONS AND CONDITIONS KNOWLEDGE OF DIET AND NUTRITION BASIC FOUR FOOD GROUPS MINIMUM DAILY REQUIREMENTS NUTRIENT REQUIREMENTS SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE	CHANGING PERCENTS TO FRACTIONS AND FRACTIONS TO PERCENTS [TEETH PRESENT–STAINED TEETH PERCENTAGE] LOCATE BY APPROXIMATION RATIONAL NUMBERS AND INTEGERS ON THE NUMBER LINE (SEQUENTIAL ORDERING) [DAY TO DAY RECORD]	VERBAL–INSTRUCTIONS & DIRECTIONS TO PATIENT WRITTEN–RECORDING ON CHARTS READ–CHARTS, GRAPHS

(TASK STATEMENT) CONDUCT SECOND SESSION OF CONTROL PROGRAM

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
PATIENT'S CHARTS TEST TUBE & SEAL SNYDER'S MEDIA CONTROL FORMS, CHARTS PHASE MICROSCOPE & SLIDES PLAQUE STAINS FLOSS TOOTH BRUSH VANITY SINK WALL AND/OR HAND MIRROR INCUBATOR INSTRUMENT FOR REMOVAL OF PLAQUE	DISCUSS PATIENT'S DENTAL PROBLEM IDENTIFY CAUSES OF DENTAL DISEASE IDENTIFY EATING HABITS DISCUSS PROPER ORAL HYGIENE TECHNIQUES, SKILLS & HABITS RELATE EATING HABITS, ORAL HYGIENE HABITS TO LIFE STYLE DEVELOP PATIENT'S PREVENTION PLAN DISCUSS ROLE OF PROFESSIONAL DENTAL SERVICES IN CONTROLLING HIS PROBLEM KNOW WHEN TO SEEK DENTIST'S CONSULTATION FAILURE MODE FAILURE TO GIVE INCENTIVE FOR MOTIVATION FAILURE TO COMPLETE ALL STEPS IN SESSION	IMPROPER USE OF INSTRUMENT TO COLLECT SPECIMEN HAZARD: LACERATE TISSUE
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
KNOWLEDGE OF MICROBIOLOGY METHODS OF CONTROL & MODIFICATION OF A BACTERIAL POPULATION NORMAL FLORA OF THE ORAL CAVITY MICRO-ORGANISMS ASSOCIATED WITH CERTAIN ORAL INFECTIONS AND CONDITIONS KNOWLEDGE OF DIET AND NUTRITION BASIC FOUR FOOD GROUPS MINIMUM DAILY SERVINGS NUTRIENT REQUIREMENTS SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE	CHANGING PERCENTS TO FRACTIONS AND FRACTIONS TO PERCENTS [TEETH PRESENT–STAINED÷PERCENTAGE] LOCATE BY APPROXIMATION RATIONAL NUMBERS AND INTEGERS ON THE NUMBER LINE (SEQUENTIAL ORDERING) [DAY TO DAY RECORD] MANIPULATION OF FORMULA INVOLVING THREE FACTORS	VERBAL–INSTRUCTION & DIRECTIONS TO PATIENT WRITTEN–RECORDING CHARTS READ–CHARTS, GRAPHS LISTEN TO PATIENT–HELP DOCTOR EVALUATE MOTIVATIONAL PROGRESS DOCTOR REINFORCES HOME CARE INSTRUCTIONS ADDITIONAL VISUAL AIDS

(TASK STATEMENT) CONDUCT THIRD SESSION OF CONTROL PROGRAM

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
TOOTHBRUSH DENTAL FLOSS ORAL IRRAGATOR DEVICE GINGIVA STIMULATORS DIARY FORMS AUDIO-VISUAL AID	ORAL HYGIENE PHASE III CHECK FOOD HABITS NUTRITIONAL ADEQUACY PERIO POCKET MEASUREMENTS DECISION TO CONTINUE WITH PROGRAM OR TO STRESS MORE INSTRUCTIONS FAILURE MODE PATIENT'S FAILURE TO RECOGNIZE HIS FOOD DEFICIENCIES AND REQUIREMENTS FAILURE TO IMPROVE ORAL HYGIENE	CORRECT EVALUATION WITH DENTIST HAZARD: MISTAKEN IMPRESSION OF SUCCESS, THEN LOSS OF TEETH

SCIENCE	MATH – NUMBER SYSTEMS	COMMUNICATIONS
MICROBIOLOGY KNOWLEDGE METHODS OF CONTROL & MODIFICATION OF A BACTERIAL POPULATION NORMAL FLORA OF THE ORAL CAVITY MICROORGANISMS ASSOCIATED WITH CERTAIN ORAL INFECTION AND CONDITIONS KNOWLEDGE OF DIET AND NUTRITION BASIC FOUR FOOD GROUPS MINIMUM DAILY SERVINGS NUTRIENT REQUIREMENTS TISSUE COLOR BLEEDING INDEX SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE	CHANGING PERCENTS TO FRACTIONS AND FRACTIONS TO PERCENTS [TEETH PRESENT–STAINED = PERCENTAGE] LOCATE BY APPROXIMATION RATIONAL NUMBERS AND INTEGERS ON THE NUMBER LINE (SEQUENTIAL ORDERING) [DAY TO DAY RECORD] MANIPULATION OF FORMULA INVOLVING THREE FACTORS	VERBAL–DISCUSSION, DIRECTING AND INSTRUCTING PATIENT WRITTEN–RECORD CHARTS READ–CHARTS & GRAPHS COMMUNICATIONS BETWEEN ASSISTANT AND DENTIST OR RELATIVE SUCCESS OF PROGRAM

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
TOOTHBRUSH FLOSS TEST TUBE & SEAL SNYDER'S MEDIA CHARTS FORMS ORAL IRRAGATOR DEVICE	CHECK PATIENT'S PROFICIENCY IN ALL ORAL HYGIENE SKILLS DISCUSS EATING CHANGES RELATE RESULTS OF PAST SNYDER TESTS INNOCULATE SNYDER MEDIA FOR FOLLOW-UP IF NECESSARY DECISION WHETHER PROGRAM WAS A SUCCESS WITH THIS PATIENT FAILURE MODE PATIENT REVERTS TO OLD HABITS	

SCIENCE	MATH – NUMBER SYSTEMS	COMMUNICATIONS
KNOWLEDGE OF MICROBIOLOGY METHODS OF CONTROL & MODIFICATION OF A BACTERIAL POPULATION NORMAL FLORA OF THE ORAL CAVITY MICROORGANISMS ASSOCIATED WITH CERTAIN ORAL INFECTIONS AND CONDITIONS KNOWLEDGE OF DIET AND NUTRITION BASIC FOUR FOOD GROUPS MINIMUM DAILY SERVINGS NUTRIENT REQUIREMENTS TISSUE COLOR BLEEDING INDEX SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE	CHANGING PERCENTS TO FRACTIONS AND FRACTIONS TO PERCENTS (TEETH PRESENT–STAINED = PERCENTAGE) LOCATE BY APPROXIMATION RATIONAL NUMBERS AND INTEGERS ON THE NUMBER LINE (SEQUENTIAL ORDERING) (DAY TO DAY RECORD) MANIPULATION OF FORMULA INVOLVING THREE FACTORS	VERBAL–DISCUSSION, INSTRUCTIONS AND DIRECTIONS TO PATIENT WRITE–RECORDING PATIENT'S CHARTS READ–CHARTS & GRAPHS LISTEN TO PATIENT'S CONCERN TELL PATIENT PRESENT CONDITION, WHAT CAN IMPROVE CONDITION, HOW TO DO IT

Duty C Performing Chairside Procedures

1 Greet and seat the patient
2 Chart
3 Prepare and assist with diagnostic procedures
4 Assist the dentist at the chair for operative procedures
5 Assist the dentist at specialty procedures
6 Assist the dentist at the chair for surgery procedures
7 Prepare and assist with impression materials (hydrocolliod, silicone, compounds)
8 Prepare and assist in rubber base impression
9 Mix zinc oxide eugenol
10 Mix zinc phosphate cement
11 Mix periodontal dressing and store
12 Prepare patients for oral surgery
13 Prepare self (assistant for surgery)
14 Sterilize instruments
15 Use the ultra-sonic cleaner
16 Clean the autoclave or driclave
17 Complete patient's records for services rendered
18 Instruct orthodontic patients in the wearing of appliances
19 Clean and prepare the x-ray tanks
20 Expose x-rays periapical & B.W.
21 Process x-ray film
22 Mount radiographs
23 Open a dental office
24 Prepare the operatory
25 Clean operaotry after dismissal of patient
26 Maintain dental equipment
27 Color code and store instruments in operatory cabinets
28 Prepare preset trays
29 File study models (numerical–cross file system)
30 Close office at end of day

(TASK STATEMENT) GREET AND SEAT THE PATIENT

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
PREPARED OPERATORY PATIENT'S CHART	GREET THE PATIENT POSITION CHAIR TO RECEIVE PATIENT ADJUST CHAIR TO OPERATING POSITION PREPARE PATIENT TO RECEIVE TREATMENT DECISION WHAT PRESET TRAY TO GET READY EVALUATE WHETHER PATIENT NEEDS OR WANTS TO CONVERSE FAILURE MODE PATIENT BECOMES UNCOMFORTABLE FROM POSITION OF CHAIR PATIENT NOT READY FOR DENTIST TO COMMENCE TREATMENT	EQUIPMENT HAZARD: DENTAL CHAIR STABILIZED ALL HANDPIECES AND LIGHTS, ETC. OUT OF PATIENT'S WAY EMOTIONAL STABILITY OF PATIENT, UPSET IF SYRINGE, INSTRUMENTS, HANDPIECE LEFT IN VIEW
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
BODY MECHANICS–CORRECT POSITIONING OF PATIENT TO RECEIVE TREATMENT		READING COMPREHENSION–READ PATIENT'S CHART TO DETERMINE PROCEDURE TO BE DONE READ MANUFACTURER'S DIRECTIONS ON OPERATING CHAIR NON-VERBAL–PATIENT TRANSMITS EMOTIONS, E.G., CALM, FEAR, HESITANCE ASSISTANT TRANSMITS FEELING OF ASSURANCE, POISE, KNOWLEDGE, DEPENDABILITY

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(TASK STATEMENT) CHART

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
PATIENT'S CHART IMPLEMENTS FOR CHARTING LEAD PENCILS COLORED PENCILS INK	PREPARE PATIENT'S RECORD FOR CHARTING RECEIVE DIRECTIONS FROM DENTIST FOR INDIVIDUAL TEETH & EDENTULOUS AREAS (USING METHOD OF DENTIST'S PREFERENCE) DECISION WHETHER ONE HAS HEARD CORRECT VERBAL DIRECTION FOR CHARTING	IMPROPER RECORDING HAZARD: WRONG TOOTH PERTAINING TO PARTICULAR PROCEDURE
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
ANATOMY OF THE HUMAN DENTITION HEAD AND NECK ANATOMY	READ AND INTERPRET CHARTS, TABLES AND/OR GRAPHS GIVING A CODING SYSTEM, RECOGNIZE AND IDENTIFY EACH UNIT INVOLVED BY ASSIGNING NECESSARY SYMBOLS, NUMERICAL OR LITERAL (SYMBOLS & COLORS) LOCATE BY APPROXIMATION RATIONAL NUMBERS AND INTEGERS ON THE NUMBER LINE (SEQUENTIAL ORDERING) (TOOTH NUMBER)	PROPER INTERPRETATION OF VERBAL COMMUNICATIONS, SYMBOLS CLARITY OF EXPRESSION HEARING PATIENT DATA FROM DOCTOR WRITING ON CHART

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(TASK STATEMENT) PREPARE AND ASSIST WITH DIAGNOSTIC PROCEDURES

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
PRE-SET TRAY EXAMINATION–BASIC ENDODONTIC DENTURE ORTHODONTIC	SELECT TRAY FOR PROCEDURE SELECT AUXILIARY EQUIPMENT PREPARE PATIENT & EXPOSE TRAY PASS & RECEIVE INSTRUMENTS (4–HANDED TECHNIQUE WHEN APPLICABLE) CLEAN UP PATIENT & DISMISS DECISION ANTICIPATION OF PASSING FAILURE MODE INABILITY TO OPERATE AUXILIARY EQUIPMENT INABILITY TO PASS INSTRUMENT WHEN NEEDED OR IMPROPER PASSING CAUSING COLLISION INACCURATE TRAY & FACILITY SET-UP	PASS INSTRUMENTS ONLY IN OPERATING ZONE HAZARD: COLLISION–DROPPING INSTRUMENT CONTAMINATION INJURY
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE	MEASUREMENT OF MATERIALS (METRIC)	NON-VERBAL–ANTICIPATION OF NEED OF INSTRUMENT & MATERIALS WRITTEN–CHARTING INFORMATION ON PATIENT'S CHART FEE SLIP FOR FRONT DESK APPOINTMENT SLIP FOR UNITS REQUESTED FOR NEXT APPOINTMENT VERBAL—REASSURANCE TO PATIENT DOCTOR'S ORDERS

(TASK STATEMENT) ASSIST THE DENTIST AT THE CHAIR FOR OPERATIVE PROCEDURES

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
PRESET TRAY - SET UPS EXAMINATION (ROUTINE) EXAMINATION (CYTOLOGY) AMALGAM RESTORATION & POLISH COMPOSITE RESTORATION & POLISH SILICATE RESTORATION & POLISH GOLD FOIL PREP GOLD INLAY PREP CROWN & BRIDGE PREP ORTHO-BANDING	SELECT SPECIFIC TRAY FOR PROCEDURE ASSIST WITH PREPARATION AND ANESTHETIC INJECTION PASS AND RECEIVE INSTRUMENTS (4-HANDED TECHNIQUE) CLEAN UP AND DISMISS PATIENT DECISION ANTICIPATION OF PASSING FAILURE MODE INABILITY TO PASS INSTRUMENTS CAUSING COLLISION INACCURATE TRAY SET-UP	DO NOT PASS INSTRUMENT IN WRONG ZONE HAZARD: COLLISION - DROPPING INSTRUMENT ON PATIENT COLLISION–INJURING PATIENT CONTAMINATION OF INSTRUMENT
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE	MEASUREMENT OF MATERIALS (METRIC)	NON-VERBAL–ANTICIPATION OF NEED OF INSTRUMENTS & MATERIALS WRITTEN–CHARTING INFORMATION ON PATIENT'S CHART FEE SLIP FOR FRONT DESK APPOINTMENT SLIP FOR UNITS REQUESTED FOR NEXT APPOINTMENT VERBAL–REASSURANCE TO PATIENT DOCTOR'S ORDERS

(TASK STATEMENT) ASSIST THE DENTIST AT SPECIALTY PROCEDURES

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
PRESET TRAY SET-UP FLUORIDE TREATMENT APPLICATION PROPHYLAXIS GOLD FOIL CONDENSING AND FINISHING SEATING A GOLD INLAY CROWN AND BRIDGE TRY-IN SEATING A CROWN OR BRIDGE DENTURE PROCEDURES PACK REMOVAL DRY SOCKET ENDODONTIC PROCEDURES CHROME CROWN PROCEDURES SUTURE REMOVAL TAKE A CULTURE TAKE A BIOPSY	SELECTION OF TRAY SET-UP FOR PROCEDURE SELECTION OF AUXILIARY EQUIPMENT PASS AND RECEIVE INSTRUMENTS–USE FOUR-HANDED TECHNIQUE WHEN APPLICABLE CLEAN UP FOR PATIENT AND DISMISS DECISION ANTICIPATE THE DOCTOR'S NEEDS FAILURE MODE INABILITY TO OPERATE AUXILIARY EQUIPMENT INACCURATE TRAY SET-UP AND FACILITY EQUIPMENT INABILITY TO PASS INSTRUMENTS PROPERLY CAUSING COLLISION	PASS INSTRUMENTS IN OPERATING ZONE ONLY HAZARD: COLLISION - DROPPING INSTRUMENTS AND INJURYING PATIENT CONTAMINATION OF INSTRUMENTS
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE	MEASUREMENT OF MATERIALS (METRIC)	NON-VERBAL–ANTICIPATION OF NEED OF INSTRUMENTS & MATERIALS WRITTEN–CHART INFORMATION ON PATIENT'S CHART FEE SLIP FOR FRONT DESK APPOINTMENT SLIP FOR UNITS REQUESTED FOR NEXT APPOINTMENT VERBAL–REASSURANCE TO PATIENT DOCTOR'S ORDERS

(TASK STATEMENT) ASSIST THE DENTIST AT THE CHAIR FOR SURGERY PROCEDURES

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
PRESET TRAYS & EQUIPMENT PERIODONTAL SEALING PERIODONTAL SUB-GINGIVAL CURETTAGE GINGIVECTOMY SIMPLE TOOTH EXTRACTION MULTIPLE TOOTH EXTRACTION COMPLEX TOOTH EXTRACTION ALVEOLECTOMY CALCULUS REMOVAL BIOPSY CYSTS HYPERPLASIA PULPECTOMY APICOECTOMY SUPERNUMERY	SELECT TRAY FOR PROCEDURE SELECT AUXILIARY EQUIPMENT ASSIST WITH ANESTHETIC PASS AND RECEIVE INSTRUMENTS IN 4 HANDED TECHNIQUE CLEAN UP PATIENT AND DISMISS DECISION ANTICIPATION IN PASSING FAILURE MODE INABILITY TO OPERATE AUXILIARY EQUIPMENT INABILITY TO PASS INSTRUMENT PROPERLY CAUSING COLLISION INACCURATE TRAY & FACILITY SET-UP	PASS INSTRUMENTS ONLY IN OPERATING ZONE HAZARD: COLLISION - DROPPING INSTRUMENT AND INJURYING POSSIBLE CONTAMINATION OF INSTRUMENT
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE		VERBAL–REASSURING PATIENT DOCTOR'S ORDERS WRITTEN–CHART ON PATIENT'S RECORDS FEE SLIP & APPOINTMENT SLIP FOR UNITS NEEDED FOR NEXT APPOINTMENT NON-VERBAL–ANTICIPATION OF NEED OF INSTRUMENT & MATERIALS

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(TASK STATEMENT) PREPARE AND ASSIST WITH IMPRESSION MATERIALS (HYDROCOLLIOD, SILICONE, COMPOUNDS)

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
UNIT FOR PREPARING IMPRESSIONS COMPOUND HEATER HYDROCOLLOID UNIT AND HOSE WATER COOLED TRAYS IMPRESSION TRAYS PAPER PAD SPATULA AIR SYRINGE ADHESIVE SILICONE MATERIAL COMPOUND MATERIAL HYDROCOLLOID MATERIAL	PREPARE APPROPRIATE EQUIPMENT PREPARE PATIENT FOR IMPRESSION PREPARE TRAY MATERIAL LOAD TRAY PASS TO DOCTOR RETRACT STABILIZE TRAY DECISION MATERIAL INCORPORTATED WELL LEAVING MATERIAL SET LONG ENOUGH WHEN TO START MIXING FAILURE MODE DISTORTED IMPRESSION–NOT STABILIZED OR PULLED TOO SOON	CORRECT POSITION OF THE PATIENT HAZARD: GAGGING SWALLOWING MATERIAL–CHOKING
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
DENTAL MATERIALS EFFECT OF HEATING AND COOLING ON STATE OF MATTER (CHANGE OF MATTER FROM ONE FORM TO ANOTHER) FLUIDS UNDER PRESSURE (Examples: INCOMPRESSIBILITY TRANSFER OF PRESSURE) TRANSFER OF HEAT FROM ONE BODY TO ANOTHER ARRANGEMENT OF MOLECULES, ATOMS AND IONS AND THE EFFECT ON STRUCTURE AND STRENGTH OF MATERIALS RESISTANCE OF MATERIALS TO CHANGE IN SHAPE SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE	MEASURE OF LENGTH MEASURES OF TEMPERATURE MEASURES OF TIME AND SPEED (Examples: TIME–SECONDS, MINUTES, ETC.; SPEED–FEET PER MINUTE, R.P.M., ETC.) [SET-UP OF MATERIAL PLUS PREPARATION]	REASSURANCE TO PATIENT INSTRUCTION TO PATIENT INSTRUCTION TO ASSISTANT VERBAL COMMUNICATION TO DENTIST NON-VERBAL–ANTICIPATION

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(TASK STATEMENT) PREPARE AND ASSIST IN RUBBER BASE IMPRESSION

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
TRAY ADHESIVE RUBBER BASE MATERIALS SYRINGE (RB) RETRACTION CARD VASOCONSTRICTOR SOLUTION INSTRUMENTS AIR SYRINGE MIXING PAD SPATULA	PREPARE TRAY FOR RUBBER BASE PREPARE PATIENT FROM IMPRESSION MIX SYRINGE MATERIAL MIX TRAY MATERIAL LOAD AND PASS BOTH MATERIALS STABILIZE TRAY UNTIL MATERIAL IS SET DECISION LEAVING MATERIAL SET LONG ENOUGH WHEN TO START MIXING MATERIAL INCORPORATED WELL FAILURE MODE DISTORTED IMPRESSION FROM WET AREA NOT STABILIZED PULLED TOO SOON	NOT CHECKING HEALTH HISTORY HAZARD: USING VASOCONSTRICTOR ON CARDIAC PATIENT
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
BLOOD AND CARDIAC EFFECT OF HEATING AND COOLING ON STATE OF MATTER (CHANGE OF MATTER FROM ONE FORM TO ANOTHER) ARRANGEMENT OF MOLECULES, ATOMS AND IONS AND THE EFFECT ON STRUCTURE AND STRENGTH OF MATERIALS RESISTANCE OF MATERIALS TO CHANGE IN SHAPE (Examples: BENDING, TWISTING, STRETCHING) SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE	MEASURE LENGTH MATERIALS–INCHES	REASSURANCE TO PATIENT INSTRUCTIONS TO PATIENT INSTRUCTIONS TO ASSISTANT VERBAL & NON-VERBAL COMMUNICATION TO DENTIST

38.

(TASK STATEMENT) MIX ZINC OXIDE EUGENOL

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
BASIC SET-UP (MIRROR, EXPLORER, COTTON, PLIERS) ZINC OXIDE POWER EUGENOL LIQUID DAMP COTTON PELLET MIXING PAD SPATULA PLASTIC INSTRUMENT	PLACE POWDER AND LIQUID ON PAD SPATULATE POWDER INTO LIQUID KNOW PROPER CONSISTENCY DECISION HOW MUCH MATERIAL TO USE FAILURE MODE INCORPORATION OF AMOUNTS OF POWDER INCORRECTLY TIME USED TO INCORPORATE WASTED OR EXCESSIVE MATERIAL	CONTAMINATION OF MATERIALS
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
SOLUBILITY RATIO OF ZINC OXIDE TO EUGENOL CEMENT (CHEMICAL AFFINITY) FACTORS AFFECTING SOLUBILITY: HEAT HUMIDITY TIME FACTOR RESISTANCE OF MATERIALS TO CHANGE IN SHAPE (Examples: BENDING, TWISTING, STRETCHING)	LIQUID & DRY MEASURES RATIO & PROPORTION [OF POWER TO LIQUID] MEASURE OF TIME AND SPEED (Examples: TIME-SECONDS, MINUTES, ETC.; SPEED-FEET PER MINUTE, R.P.M., ETC.)	VERBAL–ORDERS FROM DOCTOR TO ASSISTANT ORDERS OF DOCTOR OR ASSISTANT TO PATIENT BEFORE LEAVING THE OFFICE

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(TASK STATEMENT) MIX ZINC PHOSPHATE CEMENT

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
ZINC OXIDE POWDER ZINC PHOSPHATE LIQUID SPATULA GLASS SLAB BASIC SET-UP PLASTIC INSTRUMENT	KNOW MATERIALS USED KNOW MIXING PROCEDURE KNOW CONSISTENCY DESIRED DECISION WHEN TO INCORPORATE NEW POWDER WHEN MIX HAS REACHED PROPER CONSISTENCY FAILURE MODE USE OF AN UNCOOLED SLAB ADDING LIQUID TO A MIX UNDER OR OVER SPATULATION	CONTAMINATION OF POWDER, SLIGHT IF ANY HAZARD: INFECTION OR INJURY TO PATIENT

SCIENCE	MATH – NUMBER SYSTEMS	COMMUNICATIONS
EFFECT OF HEATING AND COOLING ON STATE OF MATTER (CHANGE OF MATTER FROM ONE FORM TO ANOTHER) ARRANGEMENT OF MOLECULES, ATOMS AND IONS AND THE EFFECT ON STRUCTURE AND STRENGTH OF MATERIALS RESISTANCE OF MATERIALS TO CHANGE IN SHAPE (Examples: BENDING, TWISTING, STRETCHING) SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE TRANSFER OF HEAT FROM ONE BODY TO ANOTHER	LIQUID AND DRY MEASURES MEASURE OF TIME AND SPEED (Examples: TIME-SECONDS, MINUTES, ETC., SPEED-FEET PER MINUTE, R.P.M., ETC.) [SECONDS-MINUTES] MULTIPLICATION AND DIVISION WITH WHOLE NUMBERS RATIO AND PROPORTION [POWDER TO LIQUID]	HEARING-ORDERS FROM DOCTOR TO ASSISTANT ON THE TYPE OF MIX

(TASK STATEMENT) MIX PERIODONTAL DRESSING AND STORE

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
WAXED PAPER MIXING PAD TONGUE BLADES OR MIXING SPATULA ZINC OXIDE POWDER EUGENOL LIQUID REFRIGERATOR WATER (SINK)	MIX DRESSING CUT DRESSING INTO SMALL PIECES WRAP IN ALUMINUM FOIL STORE IN REFRIGERATOR SOFTEN PACK WHEN READY TO USE UNDER WARM RUNNING WATER DECISION THICKNESS STIFFNESS FAILURE MODE STORED TOO LONG	CONTAMINATION OF MATERIAL HAZARD: INJURY TO PATIENT
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
EFFECT OF HEATING AND COOLING ON STATE OF MATTER. (CHANGE OF MATTER FROM ONE FORM TO ANOTHER) RELATIONSHIP OF FORCE TO DISTORTION IN AN ELASTIC BODY	LIQUID AND DRY MEASURES	NON-VERBAL –ORDERS FROM DOCTOR TO ASSISTANT

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
TELEPHONE PATIENT	PREPARE PATIENT PHYSICALLY PREPARE PATIENT PSYCHOLOGICALLY DECISION HOW MUCH THE PATIENT WISHES TO COMMUNICATE FAILURE MODE CHECK PATEINT CHART FOR HEALTH HISTORY DETAILS PLUS QUIZZES PATIENT AS TO ACTIVITIES PRIOR TO APPOINTMENT	NO EATING 8-10 HOURS BEFORE SURGERY HAZARD: ASPHYXIATION
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
DIGESTIVE SYSTEM		ORAL–TELEPHONE: BRIEF PATIENT AS TO RESPONSIBILITIES SUCH AS: FOOD AND LIQUID INTAKE MEDICATION DRIVING COMPANION NON-VERBAL--ASSISTANT REASSURES PATIENT THROUGH POSITIVE ACTIONS PATIENT CONVEYS FEELINGS TO ASSISTANT THROUGH ACTIONS VERBAL–ASSISTANT OFFERS REASSURANCE AND ENCOURAGEMENT

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(TASK STATEMENT) PREPARE SELF (ASSISTANT) FOR SURGERY

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
LAB COAT CAP ANTIBACTERIALSTATIC SOAP	CONFINE HAIR COVER UNIFORM WITH LAB COAT SCRUB HANDS DECISION THOROUGHNESS OF SCRUB FAILURE MODE TOUCHING OBJECTS AFTER SCRUBBING	CONTAMINATION HAZARD: DETRIMENTAL TO PATIENT
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
MICROBIOLOGY METHODS BY WHICH MICROORGANISMS MAY PRODUCE DISEASE METHODS OF CONTROL AND MODIFICATION OF A BACTERIAL POPULATION	MEASURE OF TIME AND SPEED (Example: TIME-SECONDS, MINUTES, ETC., SPEED-FEET PER MINUTE, R.P.M., ETC.) [TIME OF SCRUB]	NON-VERBAL–SCRUBBING IN FRONT OF THE PATIENT GIVES A FEELING OF PROFESSIONALISM, SAFETY AND CLEANLINESS TO THE PATIENT REASSURANCE THAT THE PATIENT IS IN TRAINED CAPABLE HANDS

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(TASK STATEMENT) STERILIZE INSTRUMENTS

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON

METHODS AND EQUIPMENT
- CHEMICAL STERILIZATION
- HOT OIL
- BOILING WATER
- DRYCLAVE
- AUTOCLAVE
- GLASS BEAD
- ALCOHOL
- FLAMING

PERFORMANCE KNOWLEDGE

PREPARE EQUIPMENT

SET TIME (PHYSICAL OR WRITTEN)

PREPARE INSTRUMENTS (WASH, WRAP)

PROCEED TO STERILIZE

REMOVE INSTRUMENTS

PREPARE TO STORE INSTRUMENTS

STORE

DECISION
- CORRECT METHOD OF STERILIZATION
- AVOID DAMAGE TO INSTRUMENTS

FAILURE MODE
- IMPROPER STERILIZATION METHOD
- INSUFFICIENT TIME, TEMPERATURE OR STRENGTH OF CHEMICALS
- OVERLOADING OF INSTRUMENTS

SAFETY – HAZARD

EQUIPMENT FAILURE
HAZARD: EXPLOSION

INJURY FROM CHEMICALS OR EQUIPMENT BY PRODUCT
HAZARD: BURNS–STEAM
- ABRASIONS

CHEMICALS IN EYE FROM HANDS OR SPLASHING

INFECTIONS–IMPROPER STERILIZING OF INSTRUMENTS

SCIENCE

STERILIZATION–REMOVAL OR DESTRUCTION OF ALL FORMS OF LIFE

STEAM UNDER PRESSURE RISES IN TEMPERATURE (GAS LAWS)

STERILE PROCEDURE–HANDLING & TRANSFER OF STERILE INSTRUMENTS AND MEDIA

CORROSION OF EXPOSED EDGES

VULNERABILITY OF MICROORGANISMS TO CHEMICALS
- 70% ISOPROPYL ALCOHOL
- 70% ETHYL ALCOHOL
- ZEPHRIN
- CETYLCIDE
- RADIOL

VULNERABILITY OF MICROORGANISMS TO HEAT (FLAMING AND GLASS BEAD TECHNIQUE)

MATH – NUMBER SYSTEMS

MEASURE OF TIME AND SPEED. (Example: TIME SECONDS, MINUTES, ETC., SPEED-FEET PER MINUTE, R.P.M., ETC.)

MEASURES OF TEMPERATURE

RATIO AND PROPORTION

READ AND INTERPRET CHARTS, TABLES AND/OR GRAPHS [GAUGES]

EFFECT OF HEATING AND COOLING ON STATE OF MATTER (CHANGE OF MATTER FROM ONE FORM TO ANOTHER)

FLUIDS UNDER PRESSURE (Examples: INCOMPRESSIBILITY, TRANSFER OF PRESSURE)

FORCES ACTING ON A BODY IMMERSED OR FLOATING IN A LIQUID

COMMUNICATIONS

READ–GAUGES, TIME, CHARTS

VERBAL–WARNING FROM DOCTOR ON PARTICULARLY INFECTUOUS ITEMS
- INQUIRES FROM ASSISTANT TO DOCTOR ON MODES OF STERILIZING, ETC.

(TASK STATEMENT) USE THE ULTRA-SONIC CLEANER

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
ULTRA-SONIC EQUIPMENT CLEANING SOLUTIONS EQUIPMENT TO BE CLEANED	PREPARE ULTRA-SONIC SOLUTION AND ULTRA-SONIC PREPARE EQUIPMENT TO BE CLEANED SET TIMER SWITCH REMOVE AND PREPARE EQUIPMENT FOR STERILIZING DECISION SELECTION OF SOLUTIONS TIME LENGTH FAILURE MODE IMPROPER SELECTION OR PREPARATION OF SOLUTION IMPROPER PREPARATION OF ARTICLES TO BE CLEANED	DO NOT RETRIEVE FROM SOLUTION WHILE IN OPERATION HAZARD: ULTRA-SONIC ACTION DRIVES SOLUTION INTO TISSUE
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
MICROBIOLOGY METHODS OF CONTROL & MODIFICATION OF BACTERIAL POPULATION APPLIED KNOWLEDGE OF UNTRA-SONIC ACTION	MEASURES–RATIO (LIQUIDS) MEASURES–TIME (MINUTES)	NON-VERBAL–OFFICE POLICY ON CLEANING METHOD

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A5

A5

(TASK STATEMENT) CLEAN THE AUTOCLAVE OR DRICLAVE OR ULTRASONIC

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
AUTOCLAVE CLEANER TWO BUCKETS WATER (TAP) DISTILLED WATER CLOTHS OR SPONGE (DRI-CLAVE DOOR)	OPEN ALL VALVES DRAIN AUTOCLAVE STERILIZE USING CLEANER IN WITH WATER RELEASE THE PRESSURE DRAIN REPEAT USING DISTILLED WATER FAILURE MODE INADEQUATE PRESSURE OR TEMPERATURE BUILD UP IN CHAMBER	HOT WATER & STEAM HAZARD: BURNS
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
FLUIDS UNDER PRESSURE	MEASURES OF TEMPERATURE MEASURE OF TIME AND SPEED (Examples: TIME-SECONDS, MINUTES, ETC.; SPEED-FEET PER MINUTE, R.P.M., ETC.) READ AND INTERPRET CHARTS, TABLES AND/OR GRAPHS [GAUGES]	READ-DIRECTIONS OF OPERATION

A6

A6

(TASK STATEMENT) COMPLETE PATIENT'S RECORDS FOR SERVICES RENDERED

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
NECESSARY RECORDS NECESSARY PENCILS/PENS	SERVICE WRITTEN IN ON CORRECT DATE CHART NOMENCLATURE TERMINOLOGY NOTIFY DESK OF TIME REQUIRED FOR NEXT PROCEDURE DECISION SELECTING ADEQUATE TIME FOR NEXT PROCEDURE FAILURE MODE INCORRECT OR INCOMPLETE INFORMATION	DO NOT CHART OR WRITE INCOMPLETE OR WRONG INFORMATION HAZARD: MALPRACTICE SUIT (LEGAL RECORDS)

SCIENCE	MATH – NUMBER SYSTEMS	COMMUNICATIONS
DENTAL SCIENCE–BACKGROUND KNOWLEDGE OF DENTAL PROCEDURES TO RECORD CORRECTLY FOR LEGAL PROTECTION OF DENTIST	READ AND INTERPRET CHARTS, TABLES AND/OR GRAPHS (INTERPRET SYMBOLS)	NON-VERBAL–UNDERSTANDING OFFICE POLICY RECORDING & CHARTING ON RECORDS

(TASK STATEMENT) INSTRUCT ORTHODONTIC PATIENTS IN THE WEARING OF APPLIANCES

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
PRINTED INSTRUCTIONS VISUAL AIDS PARENTS PRESENT DURING SESSION APPLIANCE	PREPARE AIDS FOR INSTRUCTION PATIENT TRANSFERRED TO VISUAL AID ROOM PARENTS ARE PRESENT INSTRUCT BOTH PARENTS & PATIENT ANSWER QUESTIONS & REAPPOINT DECISION HAVE YOU EMPHASIZED THE PARENTAL AND PATIENT RESPONSIBILITIES FAILURE MODE BROKEN WIRES, BANDS, ETC. CAUSING EMERGENCY APPOINTMENTS	BROKEN APPLIANCES HAZARD WIRE PUNCTURE WOUND REAPPOINTING PATIENT IN REQUIRED TIME HAZARD POSSIBLE PRESSURE EXTRACTIONS OF A TOOTH

SCIENCE	MATH – NUMBER SYSTEMS	COMMUNICATIONS
MAGNETIC FIELDS OF FORCE [GALVANIC FORCE OF TWO METALS TOUCHING] MOTION RESULTING FROM TWO OR MORE FORCES ACTING ON A POINT IN A BODY (Examples: EQUAL AND OPPOSITE FORCE IS APPLIED BY TWO BODIES IN CONTACT WITH EACH OTHER) [UNDERSTANDING FORCES (PRESSURES) PLACED ON TEETH BY APPLIANCES] RESISTANCE OF MATERIALS TO CHANGE IN SHAPE (Examples: BENDING, TWISTING, STRETCHING) [WIRES & BANDS AND FORCE PLACED ON THEM]		APPROPRIATE DICTION DENOTATIVE/CONNOTATIVE WORDS CLARITY OF EXPRESSION VOCABULARY USAGE SPELLING DETAILS AND INFERENCE LOGIC EMOTIONAL APPEALS (PROPAGANDA DEVICES) [STRESSING IMPORTANCE OF RULES OF CARE, WEAR & EATING] PROCESS REPORT OR INSTRUCTION–WRITTEN [INSTRUCTIONS RECORDED ON PATIENT'S CHART] PROPOSAL–WRITTEN [CONTRACT FILED WITH CHARTS, REAPPOINTMENT DATE RECORDED]

(TASK STATEMENT) CLEAN AND PREPARE THE X-RAY TANKS

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
LONG HANDLED BRUSH STAINLESS STEEL CLEANER SOFT CLOTH X-RAY DEVELOPER X-RAY FIXER WATER (DISTILLED) STIRRING STICKS FLOATING THERMOMETER	EMPTY OLD CONTENTS DRAIN WATER TANK CLEAN TANKS ADD DEVELOPER AND FIXER CHEMICALS ADD WATER & STIR FILL WATER TANK ADJUST TEMPERATURE DECISION CLEANLINESS OF THE TANKS COMPLETE FAILURE MODE INSUFFICIENT INCORPORATION OF H_2O & CHEMICALS LACK OF THOROUGH RINSING OF TANKS BEFORE PLACING THE CHEMICALS REVERSING TANKS	CHEMICALS HAZARD: EYE INJURY DO NOT REVERSE TANKS (DEVELOPER FOR FIXER) HAZARD: FAILURE OF X-RAYS CAUSING FURTHER RADIATION EXPOSURE FOR PATIENT & OPERATOR (RETAKE X-RAYS)
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
FORCES ACTING ON A BODY IMMERSED OR FLOATING IN A LIQUID TRANSFER OF HEAT FROM ONE BODY TO ANOTHER SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE	LIQUID & DRY MEASURES MEASURES OF TEMPERATURE [F°] RATIO & PROPORTION	READING COMPREHENSION–DIRECTIONS ON CHEMICALS READING THE THERMOMETER

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A9

(TASK STATEMENT) EXPOSE X-RAYS (PERIAPICAL AND B.W.)

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
X-RAYS IN DISPENSER X-RAY - CONTAINER TO RECEIVE EXPOSED X-RAYS LEAD APRON X-RAY UNIT X-RAY MONITOR (STATE LAW REQUIRED AGE UNDER 18) INSTRUMENTS	PREPARE FOR PATIENT POSITION PATIENT PLACE LEAD APRON & INSTRUCT PATIENT POSITION X-RAY FILM FOCUS OR PLACE X-RAY HEAD SELECT EXPOSURE TIME & EXPOSE DECISION PLACEMENT OF CONE EXPOSURE TIME DISTANCE OF CONE FUTURE MODE INACCURATE EXPOSURE SETTING STABILIZE X-RAY HEAD	DO NOT EXPOSE UNLESS PATIENT & OPERATOR ARE PROTECTED HAZARD: POSSIBLE MALPRACTICE SUIT DAMAGE TO CORNEAL TISSUE, REPRODUCTIVE ORGANS, BLOOD, SKIN DO NOT USE MONITOR HAZARD: FAILURE TO REGISTER CUMULATIVE EXPOSURE OF X-RAYS PERSONS UNDER 18 YEARS OF AGE ARE NOT ALLOWED TO BE IN AREA OF EXPOSURE

SCIENCE	MATH - NUMBER SYSTEMS	COMMUNICATION
DIFFERENCES IN ABSORPTION AND REFLECTION OF ENERGY BETWEEN DARK ROUGH SURFACES AND LIGHT, SMOOTH, POLISHED SURFACES [FILM, PIGMENTATION OF SKIN, METAL] COMPOSITION OF MATTER, INCLUDING PROTONS, NEUTRONS, ELECTRONS, ATOMS, MOLECULES, ELEMENTS TRANSFER OF ENERGY FROM ONE FORM TO ANOTHER (Examples: POTENTIAL TO KINETIC) [X-RAY GENERATED] RESISTANCE OF MATERIALS TO FLOW OF ELECTRICAL CURRENT [PENETRATION OF RAYS] ARRANGEMENT OF MOLECULES, ATOMS AND IONS & THE EFFECT ON STRUCTURE AND STRENGTH OF MATERIALS PHOTONIC INJURY TO ISSUE (REPRODUCTIVE ORGANS, BLOOD, SKIN, AND/OR CORNEAL TISSUE)	MEASURE OF TIME AND SPEED, (Examples: TIME-SECONDS, MINUTES, ETC., SPEED-FEET PER MINUTE, R.P.M., ETC.) GEOMETRIC CONSTRUCTIONS	VERBAL INTERACTION TO OBTAIN INSTRUCTIONS FROM DENTIST WRITTEN CHARTING INFORMATION

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
X-RAYS X-RAY DEVELOPER & FIXER TANKS X-RAY RACKS FLOATING THERMOMETER DARK ROOM TIMER	KNOW DARK ROOM TECHNIQUE MAINTAIN CORRECT TEMPERATURE PROCESS FILMS THROUGH DEVELOPER, RINSE AND FIX HANG TO DRY DECISION TIME REQUIRED IN RELATION TO TEMPERATURE FAILURE MODE INSUFFICIENT OR OVERSUFFICIENT TIME LIGHT LEAK IN THE DARKROOM INSUFFICIENT RINSING CONTAMINATION OF CHEMICALS X-RAYS TOUCHING ON RACK UNLOCKED DOOR	CHEMICALS HAZARD: EYE IRRITATION, BURNS, STAINS TO UNIFORM

SCIENCE	MATH – NUMBER SYSTEMS	COMMUNICATIONS
CHEMISTRY OF FILM DEVELOPMENT FIXATION WASHING REDUCING	MEASURES OF TEMPERATURE [F°]	

(TASK STATEMENT) MOUNT RADIOGRAPHS

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
X-RAY VIEWER X-RAY MOUNT DEVELOPED X-RAYS WORK ORDER	EVALUATE FILM FOR LINGUAL OR LABIAL ASPECT SEPARATE POSTERIOR TEETH X-RAYS FROM ANTERIOR TEETH X-RAYS USING ANATOMICAL LANDMARKS SEPARATE UPPER FROM LOWER FILMS USING ANATOMICAL LANDMARKS PLACE FILMS IN MOUNT DECISION DETERMINE HORIZONTAL OR VERTICAL PLACEMENT OF FILMS DETERMINE DIAGNOSTIC (BITEWING) FILMS DETERMINE LINGUAL OR LABIAL ASPECTS FAILURE MODE INCORRECT PLACEMENT OF FILMS	FILE UNDER CORRECT PATIENT NAME HAZARD: INCORRECT EVALUATION AND APPOINTMENT FOR WRONG PATIENT
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
ANATOMY OF THE ORAL CAVITY	READ AND INTERPRET CHARTS, GRAPHS, TABLES (X-RAYS)	READING COMPREHENSION–INTERPRET WORK ORDER

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(TASK STATEMENT) OPEN A DENTAL OFFICE

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
MAIN ENTRANCE SWITCHES (LIGHT, HEAT, WATER) OPERATORIES EQUIPMENT X-RAY TANKS SUPPLIES FILES APPOINTMENT BOOK	KNOW LOCATION AND OPERATION OF SWITCHES (LIGHT, HEAT, WATER, EQUIPMENT) KNOW OFFICE POLICY OF OPERATORY PREPARATION KNOW OFFICE POLICY FOR DAYS WORK SCHEDULE AND PATIENTS' CHARTS DECISION WHICH DUTY TO PERFORM FIRST AND SEQUENTIAL ORDER THEREAFTER FAILURE MODE ARRIVING LATE OR NOT ARRIVING EARLY ENOUGH NOT PERFORMING ALL DUTIES FAILING TO BE ORGANIZED	FAILING TO CHECK ALL EQUIPMENT HAZARD LEAKS, INOPERABLE

SCIENCE	MATH – NUMBER SYSTEMS	COMMUNICATIONS
FLUIDS UNDER PRESSURE (Examples INCOMPRESSIBILITY, TRANSFER OF PRESSURE) SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE	MEASURES OF TEMPERATURE READ AND INTERPRET CHARTS, TABLES AND/OR GRAPHS	LOGIC (ORGANIZATION) PROCESS [illegible] OR INSTRUCTIONS (WORK SCHEDULE)

(TASK STATEMENT) PREPARING THE OPERATORY

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
OPERATORY EQUIPMENT THE UNIT THE CHAIR OPERATOR & AUXILIARY STOOLS MOBILE CABINET LIGHTING CABINETS WITH SINKS EXPENDABLE SUPPLIES	MAINTAIN EQUIPMENT TO OPERATE AT ITS FUNCTIONAL MAXIMUM ADEQUATE STOCK OF EXPENDABLE SUPPLIES ASEPSIS AND ASEPTIC TECHNIQUES HABITUAL WORK ROUTINE FAILURE MODE INADEQUATE PERFORMANCE OF EQUIPMENT DURING PROCEDURE INADEQUATE SUPPLY OF EXPENDABLE MATERIALS INADEQUTE ASEPSIS AND ASEPTIC TECHNIQUES	INADEQUATE KNOWLEDGE OF TECHNIQUES HAZARD: LACK OF ASEPSIS & ASEPTIC TECHNIQUES HAP-HAZARD WORK ROUTINE HAZARD: OVERLOOKING AN IMPORTANT SUB-TASK
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
MICROBIOLOGY & STERILIZATION METHODS OF CONTROL & MODIFICATION OF A BACTERIAL POPULATION MICROORGANISMS ASSOCIATED WITH CERTAIN ORAL INFECTIONS AND CONDITIONS	GIVEN AN INSTRUMENT OF MEASURE, DETERMINE PRECISION AND/OR ACCURACY WITH RESPECT TO RELATIVE ERROR, SIGNIFICANT DIGITS AND TOLERANCE (METHOD OF MEASURE IN COMPLETION OF TASK)	NON-VERBAL: OFFICE POLICY IN RELATION TO DUTIES, TASKS AND INVOLVEMENT OF ROUTINE

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(TASK STATEMENT) CLEAN OPERATORY AFTER DISMISSAL OF PATIENT

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
EQUIPMENT USED ALCOHOL ASEPTIC SOAP SOLUTION CONTAINER FOR SOLUTION APPARATUS FOR APPLYING ASEPTIC SOLUTIONS	DEVELOP A HABITUAL WAY OF COMPLETING JOB MAINTAIN ASEPSIS AND ASEPTIC TECHNIQUES DECISION AREA COMPLETELY CLEAN FAILURE MODE NOT CLEANING ALL AREAS, LEAVING BLOOD ON LIGHT HANDLE	ASEPSIS AND ASEPTIC CONDITIONS HAZARD: CROSS CONTAMINATION
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
MICROBIOLOGY METHODS OF CONTROL & MODIFICATION OF A BACTERIAL POPULATION MICROORGANISMS ASSOCIATED WITH CERTAIN ORAL INFECTIONS AND CONDITIONS	LIQUID AND DRY MEASURES	NON-VERBAL–PROFESSIONAL POISE

(TASK STATEMENT) MAINTAIN DENTAL EQUIPMENT

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
RIGHT ANGLE HANDPIECES STRAIGHT HANDPIECES CONTRA-ANGLE HANDPIECES CHAIR UNIT UNIT LIGHT MOBILE CABINET STOOLS–DENTIST & AUXILIARY X-RAY UNIT	FOLLOW MANUFACTURER'S DIRECTIONS AS TO CLEANING, OILING & OPERATING EQUIPMENT KNOW ASEPSIS AND ASEPTIC TECHNIQUE IN REGARDS TO EQUIPMENT ESTABLISH ROUTINE PATTERN OF CHECKING EQUIPMENT AND USING PREVENTIVE MEASURES FOR LONGER LIFE PRECISION ALL EQUIPMENT WORKING TO MAXIMUM EFFICIENCY FAILURE MODE DISREGARD TO ROUTINE MAINTENANCE	EQUIPMENT HAZARD: CROSS CONTAMINATION BREAK DOWN DURING USAGE FROZEN HANDPIECES

SCIENCE	MATH – NUMBER SYSTEMS	COMMUNICATIONS
MICROBIOLOGY PRINCIPLES OF ASEPSIS & ASEPTIC TECHNIQUE		READING SKILLS-MANUFACTURER'S DIRECTIONS

(TASK STATEMENT) COLOR CODE AND STORE INSTRUMENTS IN OPERATORY CABINETS

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
COLOR CODE TAPE OR PAINT INSTRUMENTS STORAGE CABINETS IN OPERATORY SECTIONED GLASS TRAY INSERTS FOR CABINETS AND STORAGE STERILIZING SOLUTIONS SCISSORS	BE AWARE OF OFFICE POLICY IN REGARDS TO INSTRUMENTS PREPARE AND PLACE TAPE ON CLASSIFIED INSTRUMENTS STERILIZE AND STORE IN CORRECT STORAGE TRAY DECISION SELECTING CORRECT COLOR FAILURE MODE INCORRECT COLOR ON INSTRUMENT INCORRECT DRAWER & SECTION FOR STORAGE	CORRECT POSITIONING OF INSTRUMENT FOR STORAGE HAZARD GROUNDS

SCIENCE	MATH – NUMBER SYSTEMS	COMMUNICATIONS
KNOWLEDGE OF MICROBIOLOGY (STERILIZATION)	GIVEN A CODING SYSTEM, RECOGNIZE AND IDENTIFY EACH UNIT INVOLVED BY ASSIGNING NECESSARY SYMBOLS, NUMERICAL OR LITERAL	NON VERBAL - BEING AWARE OF OFFICE POLICY

(TASK STATEMENT) PREPARE PRESET TRAYS

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
TRAY SET-UPS FOR: EXAMINATION APPOINTMENT FLUORIDE TREATMENT PROPHYLAXIS AMALGAM PROCEDURE AMALGAM POLISH COMPOSITE PROCEDURE & POLISH SILICATE GOLD FOIL PROCEDURE GOLD INLAY PREPARATION SEATING A GOLD INLAY DENTURE PROCEDURES PERIODONTAL SCALING & SUBGINGIVAL CURETTAGE GINGIVECTOMY PACK REMOVAL (GINGVECTOMY) SIMPLE TOOTH EXTRACTION IMPACTED TEETH DRY SOCKET ALVEOLECTOMY TORUS REMOVAL BIOPSY CYSTS HYPERPLASIA DIAGNOSIS OF AN ENDO PATIENT ENDO PROCEDURES PULPECTOMY PULPOTOMY APICOECTOMY CHROME CROWN PROCEDURE DIAGNOSIS OF ORTHODONTIC PATIENT BANDING APPOINTMENT TAKING A CULTURE RESINS MULTIPLE EXTRACTION CYTOLOGY SUPERNUMERY CROWN & BRIDGE PREPARATION CROWN & BRIDGE TRY-IN SEATING A CROWN OR BRIDGE	SELECTION OF COLOR CODED TRAY SELECTION OF ALL ARMAMENTARIUM PROPER PLACEMENT OF ALL INSTRUMENTS PROPER STORAGE OF PRESET TRAYS DECISION PLACEMENT OF INSTRUMENTS IN ORDER OF USE FAILURE MODE OVERLOADING OF TRAY INABILITY OF TRAYS AND INSTRUMENTS TO CORRESPOND IN COLOR STORAGE OF TRAY EXTENDS PAST STERILIZATION TIME LIMIT	IMPROPER STERILIZATION AND STORAGE OF TRAYS HAZARD: CONTAMINATION
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
STERILIZATION, TAPE, COLOR CHANGE	GIVEN A CODING SYSTEM, RECOGNIZE AND IDENTIFY EACH UNIT INVOLVED BY ASSIGNING NECESSARY SYMBOLS, NUMERICAL OR LITERAL (COLOR CODING)	WRITTEN–CHECK PATIENT'S CHART OR APPOINTMENT BOOK FOR PROCEDURE TO BE PERFORMED OFFICE MANUAL WITH EACH TRAY SET-UP LISTED MISSING, BROKEN OR DULL INSTRUMENTS LISTED

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(TASK STATEMENT) FILE STUDY MODELS (NUMERICAL–CROSS FILE SYSTEM)

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
STUDY MODELS MODEL BOXES (8 SECTIONED) DATE & NUMBER STAMP RECORD BOOK OR ROLL-DEX FILE PATIENT'S CHART	RECORD DATE AND NUMBER GIVEN STUDY MODEL ON: PATIENT'S CHART PATIENT'S MODELS RECORD BOOK OR FILE MODEL BOX FILE IN NUMERICAL ORDER, EIGHT TO A BOX STORE BOXES IN NUMERICAL ORDER DECISION WHEN TO USE AN OLD FILE NUMBER FAILURE MODE CONFUSION IN LOCATING IF STEPS ARE NOT COMPLETED	MISFILED STUDY MODEL RECORD HAZARD: WRONG DIAGNOSIS GIVEN
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
	SEQUENTIAL NUMBERING	NON VERBAL – UNDERSTANDING OFFICE POLICY WRITTEN–RECORDING INFORMATION FOR CROSS FILE READ OFFICE MANUAL

(TASK STATEMENT) CLOSE OFFICE AT END OF DAY*

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
ENTRANCES -BACK & FRONT SWITCHES & VALVES OPERATORIES SUPPLIES FILES APPOINTMENT BOOK *WEEK-END *VACATION	KNOW OFFICE POLICY ON WORK SCHEDULES TRAY SET-UPS PATIENT'S CHART SWITCHES & VALVES, ELECTRICAL OUTLETS ARE OFF ROOMS ARE IN ORDER, CIGARETTES ARE OUT X-RAYS ARE HANGING TO DRY LOCK UP *WOULD EMPTY SOLUTIONS & CLEAN CONTAINERS *NOTIFY SECURITY DECISION WHICH DUTY TO PERFORM FIRST & SEQUENTIAL ORDER THEREAFTER FAILURE MODE NOT BEING ORGANIZED CAUSING DELAY IN PERFORMING DUTIES OR NOT PERFORMING ALL DUTIES	FAILING TO CHECK ALL EQUIPMENT AND DOORS HAZARD - LEAKS, FIRE, ROBBERY FAILING TO HAVE A NARCOTIC INVENTORY HAZARD - ACCOUNTING FOR SUPPLY ON HAND (ROBBERY)
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
FLUIDS UNDER PRESSURE	READ & INTERPRET CHARTS, TABLES AND/OR GRAPHS MEASURES OF TEMPERATURE SEQUENTIAL NUMBERING	NOT VERBALLY KNOWING OFFICE POLICY LOGIC [ORGANIZATION] PROCESS REPORT OR INSTRUCTION -WRITTEN [WORK SCHEDULES]

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Duty D Performing Expanded Duty Procedures

1 Place reversible posterior restorations
2 Place an anterior reversible restoration
3 Place and remove a rubber dam
4 Place a matrix band on posterior teeth
5 Polish a reversible restoration
6 Prepare and place gutta-percha temporary
7 Mix and place a temporary restoration
8 Make and seat a temporary acrylic crown
9 Remove a temporary restoration (zoe)
10 Select, prepare and seat preformed crowns
11 Prepare space maintainers and bands
12 Take an impression for diagnostic models
13 Apply topical fluoride
14 Place periodontal pack
15 Remove periodontal dressing
16 Perform prophylaxis polishing (no scaling)
17 Remove cement from seated crown and orthodontic bands

(TASK STATEMENT) PLACE A REVERSIBLE POSTERIOR RESTORATION

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
AMALGAM TRAY SET-UP OPERATORY SET-UP PATIENT DRAPE SYRINGE AND LOCAL ANESTHETIC HANDPIECES EVACUATOR AND/OR EJECTOR DENTAL MATERIALS AMALGAMATOR SYRINGE (AIR AND WATER)	TIME INVOLVED FOR SCHEDULING ASSIST DENTIST IN PREPARATION OF TOOTH (ANATHETIC AND CAVITY PREP) ASSISTANT PLACES AMALGAM WITHIN WALLS, CONDENSE OVERFILL, CARVE FUNCTIONAL ANATOMY ADJUST OCCLUSION, CALL DENTIST FOR FINAL CHECK DISMISS PATIENT FOR REAPPOINTMENT DECISION INTERMITTENT APPLICATION OF POLISH AGENTS TO REDUCE HEAT SIZE OF MIX FOR CAVITY FILL FAILURE MODE OVERHANG ON MARGINS INSUFFICIENT CONTACT INCORRECT OCCLUSION MOISTURE CONTAMINATION WRONG RATIO INCORRECT TRITURATION	ALLOWING MOISTURE TO CONTAMINATE AMALGAM HAZARD: INACCURATE OCCLUSION EXPANSION OF AMALGAM CAUSING INTENSE PAIN EXCESSIVE OCCLUSAL PRESSURE–FRACTURE RESTORATION BEFORE FINISHED POOR EVACUATING METHODS–INHILATION OF FOREIGN BODY (AMALGAM, BANDS, CLAMPS, ETC.) EXCESSIVE CONDENSATION, DEEP PREP–PULP PROTECTION NOT HAVING DOCTOR SIGN COMPLETION OF WORK ORDER HAZARD: LEGAL IMPLICATIONS FOR ASSISTANT
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
EFFECT OF HEATING AND COOLING ON EXPANSION OF MATERIALS (CHANGE OF DIMENSIONS) EFFECT OF HEATING AND COOLING ON STATE OF MATTER (CHANGE OF ONE FORM TO ANOTHER) [FRICTION AND HEAT] MAGNETIC FIELDS OF FORCE [GALVANIC CHARGES] FLUIDS UNDER PRESSURE [MURCURY COMPRESSED] COMPOSITION OF MATTER, INCLUDING PROTONS, NEUTRONS, ELECTRONS, ATOMS, MOLECULES, ELEMENTS [TRITURATION OF MATERIALS] CENTRIPETAL FORCES DEVELOPED BY BODIES IN ROTATION [CREATING A PLASTIC MASS] TRANSFER OF HEAT FROM ONE BODY TO ANOTHER [ROTATING INSTRUMENT CREATING FRICTION] EFFECTS OF FRICTION ON WORK PROCESSES AND PRODUCT QUALITY [FRICTION CREATES HEAT WHICH CAUSES PULP DAMAGE] ARRANGEMENT OF MOLECULES, ATOMS AND IONS AND THE EFFECT ON STRUCTURE & STRENGTH OF MATERIALS RESISTANCE OF MATERIALS TO CHANGE IN SHAPE SIMPLE MACHINES–MECHANICAL ADVANTAGE	RATIO AND PROPORTION [MERCURY TO ALLOY] MEASURE OF TIME AND SPEED (Example: TIME–SECONDS, MINUTES, ETC.; SPEED–FEET PER MINUTE, R.P.M., ETC.) [TRITURATION OF AMALGAMATION] MEASURES OF TEMPERATURE [FRICTION, HEAT, TIME]	NON-VERBAL–PERFORM DUTIES RECORD ON CHART VERBAL–SPECIAL INSTRUCTIONS FROM DENTIST POINTING OUT DIFFICULT PROBLEMS EVALUATE TASK AFTER FINISHING TO PATIENT–WHAT TO EXPECT WRITTEN–WORK ORDERS

(TASK STATEMENT) PLACE AN ANTERIOR REVERSIBLE RESTORATION

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
TRAY SET-UP OPERATORY SET-UP PATIENT DRAP DENTAL MATERIALS	ASSIST DENTIST IN CAVITY PREPARATION APPLY CAVITY LINERS AND RESTORATION MATERIALS TRIM EXCESS MATERIAL AND FINISH SURFACE DISMISS AND REAPPOINT PATIENT CUES TISSUE BLEEDING TISSUE BLANCHING STAINING OF MATERIAL FAILURE MODES MARGINAL OVERHANG METALLIC STAIN LIP STICK STAIN BLOOD STAIN	INACCURATE USE OF ROTARY INSTRUMENT HAZARD: TISSUE LACERATION IMPROPER USE OF SCALPEL BLADE FOR TRIMMING HAZARD: TISSUE LACERATION NOT HAVING DOCTOR SIGN WORK ORDER COMPLETION HAZARD: LEGAL IMPLICATIONS FOR ASSISTANT

SCIENCE	MATH – NUMBER SYSTEMS	COMMUNICATIONS
ARRANGEMENT OF MOLECULES ATOMS AND IONS AND THE EFFECT ON STRUCTURE AND STRENGTH OF MATERIALS [CORRECT RATIO] KNOWLEDGE OF MICROBIOLOGY METHODS OF CONTROL AND MODIFICATION OF A BACTERIAL POPULATION NORMAL FLORA OF THE ORAL CAVITY MICROORGANISMS ASSOCIATED WITH CERTAIN ORAL INFECTIONS AND CONDITIONS COMPOSITION OF MATTER, INCLUDING PROTONS, NEUTRONS, ELECTRONS, ATOMS, MOLECULES, ELEMENTS [COMPOSITION OF MIX] INERTIA AND MOMENTUM (BODY AT REST AND BODY IN MOTION) [MIX, APPLY MATERIAL TO CAVITY] MOTION RESULTING FROM TWO OR MORE FORCES ACTING ON A POINT IN A BODY [APPLY MATERIAL TO CAVITY SPACE] RELATIONSHIP OF FORCE TO DISTORTION IN AN ELASTIC BODY [APPLY MATERIAL WITH INSTRUMENT] RESISTANCE OF MATERIALS TO CHANGE IN SHAPE [MATERIAL IN FINAL STAGE OF SETTING] SIMPLE MACHINES–MECHANICAL ADVANTAGE	MEASURES OF TIME AND SPEED (Example: TIME–SECONDS, MINUTES, ETC., SPEED–FEET PER MINUTE, R.P.M., ETC.) RATIO AND PROPORTION [PROPORTION OF MATERIAL MIX]	PROCESS REPORT OR INSTRUCTION–ORAL [DENTIST TO ASSISTANT] PROPOSAL–ORAL [INSTRUCT PATIENT] PROGRESS REPORT–WRITTEN [RECORD PATIENT'S CHART, READ RECALL SCHDULE] WORK ORDER–SIGNED BY DOCTOR

(TASK STATEMENT) PLACE AND REMOVE A RUBBER DAM

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON

RUBBER DAM SET-UP
PATIENT
PLASTIC INSTRUMENT
SALIVA EJECTOR
SCISSORS

PERFORMANCE KNOWLEDGE

PHASE 1–PLACEMENT
- DETERMINATION OF AREA TO BE ISOLATED
- PREPARE THE PATIENT'S MOUTH
- MARK AND PUNCH THE RUBBER DAM
- SEAT THE CLAMP
- PLACEMENT OF COTTON NAPKIN
- APPLY THE RUBBER DAM
  - INVOLUTE AROUND TEETH
  - SECURE ANTERIORLY & POSTERIORLY
- ADJUST THE FRAME

PHASE 2–REMOVAL
- REMOVE SALIVA EJECTOR
- REMOVE THE CLAMP
- STRETCH THE DAM AWAY FROM THE TEETH
- CUT INTERPROXIMAL AREAS OF THE DAM
- REMOVE DAM AND NAPKIN
- EXAMINE PATIENT FOR ANY REMAINING PIECES OF THE DAM

DECISION
- ADDITION OF DENTAL FLOSS TO CLAMPS USED IN THE POSTERIOR REGION

SAFETY – HAZARD

CLAMP–EMERGENCY LOOP OF DENTAL FLOSS
HAZARD: ACCIDENTAL SWALLOWING BY PATIENT

SCISSORS
HAZARD: CUTS

CLAMPS
HAZARD: CUT TISSUE
- CAUSE RECESSION OF TISSUE
- CUT OFF CIRCULATION

DECISION (con't.)
- SELECTION OF CLAMP
- WEIGHT OF DAM MATERIAL
- HOLE PLACEMENTS

FAILURE MODE
- INADEQUATE RETRACTION OF DAM MATERIAL TO GINIVAL MARGIN
- CLAMP OUT OF PLACE OR NOT STABILIZED
- LEAKING–IMPROPER HOLE PLACEMENT

SCIENCE

FLUIDS UNDER PRESSURE. (Examples: INCOMPRESSIBILITY, TRANSFER OF PRESSURE.)

FORCES ACTING ON A BODY IMMERSED OR FLOATING IN A LIQUID

RESISTANCE OF MATERIALS TO CHANGE IN SHAPE

MATH – NUMBER SYSTEMS

DETERMINATION OF AREA AND VOLUME OF CYLINDERS
[TOOTH SIZE, PLACEMENT, ROTATION]

DETERMINATION OF AREA AND VOLUME OF RECTANGULAR, CUBE & RIGHT TRIANGULAR PRISMS

DETERMINATION OF THE SURFACE AND VOLUME OF A SPHERE

COMMUNICATIONS

VERBAL–PATIENT'S APPREHENSIONS EXPRESSED
ASSISTANT REASSURANCE TO PATIENT, CONTINUAL
DENTIST'S INSTRUCTIONS FOR ASSISTANT

WORK ORDER–SIGNED BY DOCTOR

(TASK STATEMENT) PLACE A MATRIX BAND ON POSTERIOR TEETH

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
MOUTH MIRROR EXPLORER COTTON PLIERS WOODEN WEDGES MATRIX BAND MATRIX RETAINER PATIENT	SELECT AND TRIM A BAND CONTOUR THE BAND PLACE BAND IN RETAINER PLACE ON TOOTH & TIGHTEN PLACE WOODEN WEDGE DECISION IS BAND SNUG IS BAND POSITIONED CORRECTLY IS WEDGE SECURE FAILURE MODE INSUFFICIENT BURNISHING OF BAND TO ACHIEVE CONTOUR FAILURE OF THE BAND TO FIT SNUG AT THE GINGIVAL SEAT–OVERHANG IMPROPER PLACEMENT OF THE WEDGE	SHARP BAND EDGES HAZARD: CUTS PATIENT SWALLOWING SMALL ARMAMENTARIUM HAZARD: CHOKING IMPROPER SEATING OF MATRIX OR WEDGES HAZARD: OVERHANG OF MATERIAL, COULD OVER A A PERIOD OF TIME CREATE A PERIODONTAL PROBLEM NOT HAVING DOCTOR SIGN WORK ORDER COMPLETION HAZARD: LEGAL IMPLICATIONS FOR ASSISTANT
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
ARRANGEMENT OF MOLECULES, ATOMS AND IONS AND THE EFFECT ON STRUCTURE AND STRENGTH OF MATERIALS RESISTANCE OF MATERIALS TO CHANGE IN SHAPE. (Examples: BENDING, TWISTING, SHAPING.) SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE	DETERMINATION OF AREA AND VOLUME OF CYLINDERS	VERBAL–ASSISTANT TO PATIENT REASSURANCE SIMPLE EXPLANATION OF WHAT IS BEING DONE WORK ORDER–SIGNED BY DOCTOR

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(TASK STATEMENT) POLISH A REVERSIBLE RESTORATION

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
ABRASIVE STONES FINISHING BUR SANDPAPER DISCS RUBBER PROPHY CUP & PUMICE BRISTLE BRUSH TIN OXIDE BASIC SET-UP PATIENTS' CHARTS	READ CHART FOR ORDERS REMOVE EXCESS AMALGAM REMOVE EXCESS ON PROXIMAL SURFACES POLISH THE RESTORATION PLACE FINAL FINISH DECISION COMPLETENESS OF RECONTOURING COMPLETENESS OF POLISH TO ALL AREAS OCCLUSION FAILURE MODE EXCESSIVE HEAT FROM BUR LOSS OF STRENGTH IN THE RESTORATION PULPAL DAMAGE	IMPROPER PLACEMENT OF FINGER POSITION HAZARD SLIP, LACERATE TISSUE HOLDING BUR ON RESTORATION FOR TOO LONG PERIOD AT A HIGH RATE OF SPEED HAZARD PULPAL DAMAGE, LOSS OF TOOTH OR ENDODONTIC TREATMENT FAILING TO HAVE DOCTOR CHECK OUT WORK AND SIGN RECORD HAZARD LEGAL IMPLICATIONS FOR ASSISTANT

SCIENCE	MATH – NUMBER SYSTEMS	COMMUNICATIONS
DIFFERENCES IN ABSORPTION AND RADIATION OF ENERGY BETWEEN DARK ROUGH SURFACES AND LIGHT, SMOOTH POLISHED SURFACES [POLISH] ARRANGEMENT OF MOLECULES, ATOMS AND IONS AND THE EFFECT ON STRUCTURE AND STRENGTH OF MATERIALS EFFECT OF HEATING AND COOLING ON STATE OF MATTER (CHANGE OF MATTER FROM ONE FORM TO ANOTHER) TRANSFER OF HEAT FROM ONE BODY TO ANOTHER INERTIA AND MOMENTUM (BODY AT REST AND BODY IN MOTION) TRANSFER OF ENERGY FROM ONE FORM TO ANOTHER SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE	MEASURES OF TIME AND SPEED. (Example. TIME – SECONDS, MINUTES, ETC.; SPEED–FEET PER MINUTE, R.P.M., ETC.) [R.P.M., FRICTION, TEMPERATURE]	NONVERBAL–KNOWLEDGE, REASSURANCE WRITTEN–READ ORDERS RECORD–WORK ON CHART VERBAL–HAVE DOCTOR CHECK WORK AND SIGN WORK ORDER

(TASK STATEMENT) PREPARE AND PLACE GUTTA-PERCHA TEMPORARY

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
GUTTA-PERCHA STICK FLAME INSTRUMENT COTTON ROLL SALIVA EJECTOR	COMPLETE PROCEDURE TO PLACEMENT OF TEMPORARY PREPARE INSTRUMENT TO APPLY GUTTA-PERCHA COOL GUTTA-PERCHA & INSTRUMENT TO POINT IT WILL NOT BURN TISSUE AND APPLY TO CAVITY PREP FINISH & SMOOTH DECISION INSTRUMENT & MATERIAL COOLED ENOUGH FAILURE MODE INABILITY TO MAKE MATERIAL STICK IN CAVITY	DO NOT APPLY MATERIAL WITH HOT INSTRUMENT HAZARD: BURN PATIENT AVOID BEING CARELESS & DROPPING MATERIALS OR INSTRUMENT IN PATIENT'S THROAT HAZARD: CHOKE NOT HAVING DOCTOR SIGN WORK ORDER COMPLETION HAZARD: LEGAL IMPLICATIONS FOR ASSISTANT
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE		NON-VERBAL - KNOWING PERFORMANCE KNOWLEDGE VERBAL–RECEIVE ORDERS FROM DOCTOR WRITTEN–RECORD SERVICES ON PATIENT'S CHART PREPARE FEE SLIP & APPOINTMENT UNITS FOR DESK TERMINOLOGY WORK ORDER–SIGNED BY DOCTOR

(TASK STATEMENT) MIX AND PLACE A TEMPORARY RESTORATION

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
SPATULA (SMALL METAL) GLASS SLAB COTTON ROLL AIR SYRINGE LIQUID–POWDER INSTRUMENT FOR APPLICATION NO. 4 BUR (ROUND) & 5-SPD HANDPIECE ARTICULATOR PAPER RUBBER DAM SET-UP	MATERIALS TO USE PROPER MIXING METHOD INSTRUMENTATION FOR PLACEMENT DECISION AMOUNT OF MATERIAL NEEDED CORRECT CONTOUR & OCCLUSION AREA DRY FAILURE MODE RETENTION FAILURE INADEQUATE SEAL OF MARGINS OCCLUSION ELEVATED MOISTURE CONTAMINATION MARGINAL OVERHANG	LOSS OF CONTROL OF HANDPIECE HAZARD: TISSUE LACERATION ACCELERATED MIXING HAZARD: INABILITY TO DISSAPATE CHEMICAL HEAT DROPPING MATERIAL INTO AIRWAYS HAZARD: CHOKING NOT HAVING A DOCTOR SIGN A WORK ORDER COMPLETION HAZARD: LEGAL IMPLICATIONS FOR ASSISTANT
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
KNOWLEDGE OF MICROBIOLOGY KNOWLEDGE OF TOOTH ANATOMY (OCCLUSION) KNOWLEDGE OF DENTAL MATERIALS EFFECT OF HEATING AND COOLING ON STATE OF MATTER (CHANGE OF MATTER FROM ONE FORM TO ANOTHER) [CHEMICAL HEAT CHANGE OF MATERIALS] RELATIONSHIP OF FORCE TO DISTORTION IN AN ELASTIC BODY [PLACEMENT OF MATERIALS] SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE	LIQUID & DRY MEASURES [METRIC] RATIO & PROPORTION [POWDER TO LIQUID]	APPROPRIATE DICTION DENOTATIVE/CONNOTATIVE WORDS CLARITY OF EXPRESSION VOCABULARY USAGE SPELLING DETAILS AND INFERENCE LOGIC [COMMUNICATED WITH PATIENT CONCERNING DETAIL OF PROCEDURE AND THE NEED OF THEIR COOPERATION] PROGRESS REPORT–WRITTEN [RECORD PROCEDURE ON PATIENT'S CHART] WORK ORDER–SIGNED BY A DOCTOR

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(TASK STATEMENT) MAKE AND SEAT A TEMPORARY ACRYLIC CROWN

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
ACRYLIC MATERIALS MIXING EQUIPMENT HANDPIECE, BURS, MANDRELS & DISKS LUBRICANT ARTICULATING PAPER TEMPORARY CEMENT AND LIQUID GLASS SLAP SPATULA EJECTOR	KNOW HOW TO USE HAND PIECE KNOW HOW TO PREPARE ACRYLIC MASS KNOW HOW TO FORM & FIT MASS TO PREPARE TOOTH OR MODEL KNOW HOW TO SHAPE, CONTOUR AND OCCLUDE MIX CEMENT, FILL & SEAT CROWN DECISION WHEN TO CALL DENTIST FOR CHECK WHEN CROWN IS FINISHED FAILURE MODE SHORT MARGINS INACCURATE OCCLUSION SHORT CONTACTS	FAILURE TO REMOVE ACRYLIC MASS BEFORE COMPLETELY SET HAZARD WILL HAVE TO CUT OFF & START OVER NOT HAVING A DOCTOR SIGN A WORK ORDER COMPLETION HAZARD: LEGAL IMPLICATIONS FOR ASSISTANT
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
TOOTH ANATOMY MICROBIOLOGY METHODS OF CONTROL & MODIFICATION OF A BACTERIAL POPULATION NORMAL FLORA OF THE ORAL CAVITY MICROORGANISMS ASSOCIATED WITH CERTAIN ORAL INFECTIONS AND CONDITIONS COMPOSITION OF MATTER, INCLUDING PROTONS, NEUTRONS, ELECTRONS, ATOMS, MOLECULES, ELEMENTS SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE	WORK INPUT, WORK OUTPUT, FRICTION AND EFFICIENCY IN SIMPLE MACHINES [HANDPIECE & MATERIAL SURFACE] EFFECT OF HEATING AND COOLING ON EXPANSION OF MATERIALS (CHANGE OF DIMENSIONS) [REVERSE FORM OF MATERIAL] TRANSFER OF HEAT FROM ONE BODY TO ANOTHER [HEAT & FRICTION]	APPROPRIATE DICTION & EMOTIONAL APPEALS (PROPAGANDA DEVICES) [RELATING TO PATIENT, ENCOURAGING THEM TO COOPERATE] CLARITY OF EXPRESSION [INSTRUCTIONS TO PATIENT] LISTENING TO PATIENTS WORK ORDER–SIGNED BY A DOCTOR

(TASK STATEMENT) REMOVE A TEMPORARY RESTORATION (ZOE)

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
HAND INSTRUMENTS COTTON ROLLS AIR SYRINGE COTTON PLEDGETS BASIC THREE SET-UP RUBBER DAM SET-UP SALIVA-EJECTOR ROUND BUR & HANDPIECE (5-SPD)	HOW TO USE HANDPIECE AND BARS HOW MUCH TO REMOVE RECOGNIZE DIFFERENCE BETWEEN TOOTH & TEMPORARY FILLING PLACE RUBBER DAM & EJECTOR USE SLOW SPEED HANDPIECE AND ROUND BUR, REMOVE MAJOR PORTION OF TEMPORARY MATERIAL USE SELECTED HAND INSTRUMENT AND REMOVE MATERIAL FROM WALLS & FLOOR OF CAVITY LEAVING A MM OR TWO AS DIRECTED BLOW CLEAN CALL DENTIST DECISION THE AMOUNT TO BE LEFT ON FLOOR FOR A BASE FAILURE MODE CUTTING INTO PREP WALL & FLOOR OF CAVITY FACTURING MARGINS DAMAGING PULP	IMPROPER USE OF HANDPIECE HAZARD: REMOVAL OF TOO MUCH BASE MATERIAL LACERATION OF TISSUE IMPROPER USE OF HAND INSTRUMENT HAZARD: DAMAGE TO TOOTH MARGINS LACERATION OF TISSUE NOT HAVING A DOCTOR SIGN A WORK ORDER COMPLETION HAZARD: LEGAL IMPLICATIONS FOR ASSISTANT
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
KNOWLEDGE OF ANATOMY–TOOTH MICROBIOLOGY METHODS OF CONTROL AND MODIFICATION OF A BACTERIAL POPULATION NORMAL FLORA OF THE ORAL CAVITY MICROORGANISMS ASSOCIATED WITH CERTAIN ORAL INFECTIONS AND CONDITIONS ARRANGEMENT OF MOLECULES, ATOMS AND IONS AND THE EFFECT ON STRUCTURE AND STRENGTH OF MATERIALS	MEASURES OF LENGTH [METRIC]	APPROPRIATE DICTION, DENOTATIVE/CONNOTATIVE WORDS, CLARITY OF EXPRESSION, VOCABULARY, USAGE, SPELLING, DETAILS AND INFERENCE, LOGIC, EMOTIONAL APPEALS (PROPAGANDA DEVICES) [TO DENTIST, TO PATIENT & RETURN TO ASSISTANT] PROCESS REPORT OR INSTRUCTION–WRITTEN [RECORDING ON PATIENT'S CHART] WORK ORDER–SIGNED BY A DOCTOR

(TASK STATEMENT) SELECT, PREPARE, AND SEAT A PERFORMED CROWN

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
CONTRA-ANGLE ROUND-NOSED TAPERING STONE DIAMOND DISCS (OPTIONAL) ASSORTED CHROME STEEL CROWNS BALL AND SOCKET PLIERS ZINC OXYPHOSPHATE CEMENT	SELECT A CROWN CUT DOWN THE CROWN CRIMP GINGIVAL BORDER OF CROWN CEMENT THE CROWN REMOVE EXCESS CEMENT DECISION SIZE OF CROWN HEIGHT OF CROWN ACCURACY OF BORDERS FAILURE MODE TOO NARROW CROWN–SKIMPY MARGINS & CONTACTS INSUFFICIENT OR OVERSUFFICIENT HEIGHT NOT FITING AT THE CERVICAL LINE NOT LETTING THE CEMENT SET	OVEREXTENDED BORDER–PATIENT HAZARD: GINGIVAL TRAUMA CHROME CROWN–ASSISTANT HAZARD: CUTS NOT HAVING A DOCTOR SIGN A WORK ORDER COMPLETION HAZARD: LEGAL IMPLICATIONS FOR ASSISTANT
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
TOOTH ANATOMY	DETERMINATION OF AREA AND VOLUME OF CYLINDERS [VISUAL ESTIMATION] LOCATE BY APPROXIMATION RATIONAL NUMBERS AND INTEGERS ON THE NUMBER LINE (SEQUENTIAL ORDERING) [SEQUENTIAL NUMBERING]	VERBAL–DOCTOR TO ASSITANT–INSTRUCTIONS ASSISTANT TO PATIENT–REASSURANCE NON-VERBAL–ASSISTANT PROJECTS FEELINGS OF ASSURANCE, CONFIDENCE, KNOW HOW WORK ORDER–SIGNED BY A DOCTOR

(TASK STATEMENT) PREPARE SPACE MAINTAINERS & BANDS

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
ALGINATE WATER LIQUID & DRY MEASURE RUBBER BOWL SPATULA 18-CARAT SOLDER BORAX FLUX ASSORTED PREFORMED CHROME STEEL BANDS ZOP GLASS SLAB CEMENT SPATULA	SELECT & TRIM PREFORMED CHROME STEEL BAND TAKE ALGINATE IMPRESSION REMOVE BAND IN IMPRESSION MATERIAL ADAPT WIRE SOLDER WIRE REMOVE SPACE MAINTAINER & GRIND AWAY EXCESS SOLDER POLISH CEMENT DECISION CHOOSING CORRECT BAND LETTING ALGINATE SET LONG ENOUGH WHERE TO SOLDER WIRE FAILURE MODE NOT LETTING ALGINATE IMPRESSION SET LONG ENOUGH SOLDERING WIRE AT WRONG PLACE ON BAND FITTING BAND INCORRECTLY	PATIENT AWARE OF SMALL ARMAMENTARIUM HAZARD: CHOKING, ASPHYXIATION
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
EFFECT OF HEATING AND COOLING ON STATE OF MATTER (CHANGE OF MATTER FROM ONE FROM TO ANOTHER) PRINCIPLES OF SOLDERING	LIQUID & DRY MEASURES RATIO & PROPORTION DETERMINATION OF AREA AND VOLUME OF CYLINDERS (BANDS AS CYLINDER)	VERBAL–INSTRUCTIONS FROM DOCTOR TO ASSISTANT INSTRUCTIONS FROM ASSISTANT TO PATIENT NON-VERBAL–ASSISTANT PROJECTS TO PATIENT POSITIVE FEELINGS

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
PATIENT IMPRESSION TRAYS IMPRESSION MATERIALS MEASURING DEVICES SPATULA RUBBER BOWL OR MIXING PAD SALIVA EJECTOR AND/OR ORAL EVACUATOR AIR SYRINGE GAUZE ORANGE OIL SOLVENT	PREPARE PATIENT SELECT TRAYS MIX IMPRESSION MATERIAL PLACE IMPRESSION MATERIAL IN TRAY PLACE TRAY IN PATIENT'S MOUTH REMOVE TRAY HAVE DOCTOR CHECK IMPRESSION PREPARE PATIENT FOR DISMISSAL DECISION DETERMINE WHEN MATERIAL IS SET DETERMINE WHAT SIZE TRAY TO USE FAILURE MODE SETTING OF MATERIAL BEFORE TRAY PLACEMENT UNSATISFACTORY MIX–AIR BUBBLES IMPROPER PREPARATION OF AREA TO BE RECORDED RESULTING IN IMPERFECTIONS INSUFFICIENT MATERIAL EXCESSIVE MATERIAL	TOO WET IMPRESSION MATERIAL HAZARD: CHOKING OF PATIENT DUE TO RUNNING DOWN THE THROAT EXCESSIVE MATERIAL–GAGGING TOO SMALL TRAY–CUTTING TISSUE MATERIAL POORLY DISTRIBUTED–GAGGING NOT HAVING A DOCTOR SIGN A WORK ORDER COMPLETION HAZARD: LEGAL IMPLICATIONS FOR ASSISTANT
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
FLUIDS UNDER PRESSURE (Examples: INCOMPRESSIBILITY, TRANSFER OF PRESSURE) EFFECT OF HEATING AND COOLING ON STATE OF MATTER (CHANGE OF MATTER FROM ONE FORM TO ANOTHER) COMPOSITION OF MATTER, INCLUDING PROTONS, NEUTRONS, ELECTRONS, ATOMS, MOLECULES, ELEMENTS EFFECTS OF FRICTION ON WORK PROCESSES AND PRODUCT QUALITY RELATIONSHIP OF FORCE TO DISTORTION IN AN ELASTIC BODY FORCES ACTING ON A BODY IMMERSED OR FLOATING IN A LIQUID TRANSFER OF HEAT FROM ONE BODY TO ANOTHER EFFECT OF HEATING AND COOLING ON EXPANSION OF MATERIALS (CHANGE OF DIMENSIONS) SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE	LIQUID & DRY MEASURES MEASURES OF LENGTH MEASURE OF TIME AND SPEED. (Examples: TIME–SECONDS, MINUTES, ETC.; SPEED–FEET PER MINUTE, R.P.M., ETC.) RATIO & PROPORTION DETERMINATION OF AREA, PERIMETER AND DIAGONALS OF QUADRILATERALS (4-SIDED FIGURES) [QUADRILATERAL AREA] DETERMINATION OF AREA AND VOLUME OF RECTANGULAR, CUBE AND RIGHT TRIANGULAR PRISMS [VOLUME OF RECTANGULAR PRISM] MEASURE WITH THE METRIC AND ENGLISH SYSTEM AND CONVERT BETWEEN THEM	VERBAL–INSTRUCTIONS TO THE PATIENT REASSURANCE TO THE PATIENT COMMUNICATIONS WITH DOCTOR OF GAGGING OR APPREHENSION APPARENT WORK ORDER–SIGNED BY A DOCTOR

(TASK STATEMENT) APPLY TOPICAL FLUORIDE

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
FLUORIDE SOLUTION OR GEL MAXILLARY AND MANDIBULAR FLUORIDE TRAYS (OPTIONAL) OR COTTON SWABS AIR SYRINGE COTTON ROLLS BASIC THREE SET-UP TIMER SALIVA EJECTOR	PREPARE TRAY SET-UP PREPARE FLUORIDE TRAY PREPARE PATIENT'S ORAL CAVITY APPLY TRAYS WITH GEL OR APPLY GEL WITH SWABS SET TIMER SPRAY RINSE ORAL CAVITY PREPARE TO DISMISS PATIENT DECISION SIZING TRAYS PREPARATION OF PATIENT COMPLETE PAST FLUORIDE USE FAILURE MODE CONTAMINATION OF GEL WITH SALIVA	*PERMITTING EXCESSIVE FLUORIDE GEL TO BE SWALLOWED BY PATIENT HAZARD: NAUSEA NOT HAVING A DOCTOR SIGN A WORK ORDER COMPLETION HAZARD: LEGAL IMPLICATIONS FOR ASSISTANT

SCIENCE	MATH – NUMBER SYSTEMS	COMMUNICATIONS
CHEMICAL BONDING OF FLUORIDE TO DENTAL ENAMEL CHEMICAL ACTIVITY OF FLUORIDE FLUIDS UNDER PRESSURE (Examples: INCOMPRESSIBILITY, TRANSFER OF PRESSURE) FORCES ACTING ON A BODY IMMERSED OR FLOATING IN A LIQUID	LIQUID & DRY MEASURES (LIQUID MEASURE, VOLUME, METRIC) MEASURES OF TIME AND SPEED. (Example: TIME–SECONDS, MINUTES, ETC.. SPEED–FEET PER MINUTE, R.P.M., ETC.)	APPROPRIATE DICTION AND CLARITY OF EXPRESSION (SELECTIVE INSTRUCTIONS TO PATIENT) VOCABULARY (LAY TERMINOLOGY) EMOTIONAL APPEALS (PROPAGANDA DEVICES) (APPEALING TO PATIENT) PROGRESS REPORT–ORAL (TO DENTIST) PROGRESS REPORT–WRITTEN (RECORDED ON PATIENT'S CHART) *PATIENT'S PAST HISTORY IN THE USE OF FLUORIDE WORK ORDER–SIGNED BY A DOCTOR

(TASK STATEMENT) PLACE PERIODONTAL PACK

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
CUP OF WATER MIXED PACK NO. 7 PLASTIC SPATULA	DAMPEN FINGERS ROLL PACK MAKING A SMALL CYLINDER PLACE ON INTERPROXIMAL, LINGUAL & BUCCEAL AREAS DECISION IS WOUND COMPLETELY COVERED FAILURE MODE TOO MUCH BULKY MATERIAL EXCESS MOISTURE (BLOOD, SALIVA) INSECURE PLACEMENT OF PACK	OVERMANIPULATION OF PACK HAZARD: BLEEDING NOT HAVING A DOCTOR SIGN A WORK ORDER COMPLETION HAZARD: LEGAL IMPLICATIONS FOR ASSISTANT

SCIENCE	MATH – NUMBER SYSTEMS	COMMUNICATIONS
EFFECT OF HEATING AND COOLING ON STATE OF MATTER (CHANGE OF MATTER FROM ONE FORM TO ANOTHER) ARRANGEMENT OF MOLECULES, ATOMS AND IONS AND THE EFFECT ON STRUCTURE AND STRENGTH OF MATERIALS RESISTANCE OF MATERIALS TO CHANGE IN SHAPE	DETERMINATION OF AREA AND VOLUME OF CYLINDERS	VERBAL–REASSURANCE TO PATIENT WORK ORDER–SIGNED BY A DOCTOR

(TASK STATEMENT) REMOVE PERIODONTAL DRESSING

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
EXPLORER SCALES HYDROGEN PEROXIDE BULB SYRINGE SUTURE SCISSORS MOUTH MIRROR COTTON PLIERS COTTON TIP APPLICATORS	BREAK DRESSING AWAY FROM THE TEETH WITH SLIGHT PRESSURE REMOVE CLEAN OFF EXCESS PIECES OF DRESSING REMOVE SUTURES IF USED DECISION SHOULD DRESSING BE REAPPLIED FORCE OF DRESSING REMOVAL DEPENDING ON SUTURES USED FAILURE MODE TRAUMATIZING TISSUE AT REMOVAL	SHARP INSTRUMENTS HAZARD INJURY TO THE PATIENT'S GINGIVA CHOKING ON SMALL PARTICLES NOT HAVING A DOCTOR SIGN A WORK ORDER COMPLETION HAZARD LEGAL IMPLICATIONS FOR ASSISTANT
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
KNOWLEDGE OF PERIODONTIA TREATMENT FORCES ACTING ON A BODY IMMERSED OR FLOATING IN A LIQUID INERTIA AND MOMENTUM (BODY AT REST AND BODY IN MOTION) SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE		VERBAL–ASSISTANT TO PATIENT REASSURANCE DOCTOR TO ASSISTANT–ORDERS TO PROCEED WITH TASK ASSISTANT TO PATIENT–EXPLAINING STEPS AND HELP BY PATIENT WORK ORDER–SIGNED BY DOCTOR

(TASK STATEMENT) PERFORM PHYLAXIS POLISHING (NO SCALING)

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
HANDPIECE RUBBER CUP PUMICE PASTE SALIVA EJECTOR MOUTHWASH ORAL EVACUATOR	SELECT PRESET TRAY PREPARE AUXILIARY EQUIPMENT PREPARE PATIENT POLISH TOOTH CROWNS PREPARE PATIENT FOR DISMISSAL DECISION ARE THE TEETH READY FOR POLISH FAILURE MODE INCOMPLETE POLISH INCOMPLETE MOISTURE CONTROL	*CONTAMINATION OF AREA HAZARD: INCOMPLETE POLISH *CONTROL OF HANDPIECE HAZARD: INJURY TO SELF OR PATIENT NOT HAVING A DOCTOR SIGN A WORK ORDER COMPLETION HAZARD LEGAL IMPLICATIONS FOR ASSISTANT
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE		VERBAL–DIRECTION FROM DENTIST TO ASSISTANT DIRECTIONS FROM ASSISTANT TO PATIENT READING COMPREHENSION READ & INTERPRET CHART WORK ORDER–SIGNED BY DOCTOR

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(TASK STATEMENT) REMOVE CEMENT FROM SEATED CROWN AND ORTHODONTIC BANDS

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
HAND INSTRUMENTS POWDER AND LIQUID SLAB & SPATULA SIZED BANDS OR CROWN COTTON ROLLS AIR SYRINGE	SELECT PROPER HAND INSTRUMENTS FOR PROCEDURE PREPARE AND DRY AREA INCORPORATE POWDER & LIQUID AND APPLY TO APPLIANCE SEAT AND ADJUST DECISION AREA DRY FAILURE MODE TRAPPED AIR CONTAMINATION OF MIX IMPROPER INCORPORATION OF POWDER & LIQUID	SALIVA CONTROL HAZARD: CONTAMINATION APPLIANCE CONTROL HAZARD: LOSS OF AN APPLIANCE IN SEATING AREA CHOKING NOT HAVING A DOCTOR SIGN A WORK ORDER COMPLETION HAZARD: LEGAL IMPLICATIONS FOR ASSISTANT
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
MICROBIOLOGY AND CONTROL OF MICROORGANISMS METHODS OF CONTROL & MODIFICATION OF A BACTERIAL POPULATION NORMAL FLORA OF THE ORAL CAVITY MICROORGANISMS ASSOCIATED WITH CERTAIN ORAL INFECTIONS AND CONDITIONS	MEASURES–METRIC	VERBAL–DIRECTIONS FROM DENTIST TO ASSISTANT DIRECTION FROM ASSISTANT TO PATIENT WORK ORDER–SIGNED BY DOCTOR

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Duty E Performing Dental Laboratory Skills

1 Box an impression
2 Pour a plaster diagnostic model
3 Trim a dental plaster model (diagnostic)
4 Prepare and pour a stone work model
5 Trim a stone work model
6 Articulate a model
7 Construct a custom made tray
8 Construct a compound tray
9 Fabricate a wax bite rim
10 Construct a shellac base plate
11 Prepare copper tube for impression
12 Construct an acrylic temporary
13 Prepare a wax pattern
14 Sprue a wax pattern
15 Hand invest a wax pattern
16 Cast gold alloy
17 Pickle and finish cast gold alloy
18 Replace a tooth in a denture
19 Polish a denture
20 Process an acrylic retainer
21 Size orthodontic bands

(TASK STATEMENT) BOX AN IMPRESSION

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
IMPRESSION BOXING WAX BUNSEN BURNER NO. 7 WAX SPATULA	PLACE ROPE WAX AROUND IMPRESSION LUTE WAX TO IMPRESSION DECISION ESTABLISHMENT OF DEPTH AND EXTENT OF PERIPHERAL ROLL FAILURE MODE INSUFFICIENT DEPTH OF WAX INSUFFICIENT SECURING OF WAX	BUNSEN BURNER HAZARD BURN OR FIRE
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
EFFECT OF HEATING AND COOLING ON STATE OF MATTER SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE	DETERMINATION OF AREA AND VOLUME OF CYLINDERS	

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TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON

DENTAL PLASTER
TWO GLASS PLATES
LAB KNIFE
VIBRATOR
RUBBER BOWL
SPATULA
DRY BALANCE
WET GRADUATE MEASURER
WATER
ALGINATE IMPRESSION

PERFORMANCE KNOWLEDGE

RINSE IMPRESSIONS
MIX PLASTER & WATER
VIBRATE PLASTER MIX INTO IMPRESSION
FILL IMPRESSION ABOVE & COVERING THE MUCO-BUCCAL FOLD
PLACE REMAINING PLASTER MIX ON GLASS PLATE
INVERT TRAY CONTAINING IMPRESSION ON TO THE PLASTER MASS

DECISION
- SELECTING PROPER VIBRATOR SPEED
- DETERMINING PLASTER AMOUNT

FAILURE MODE
- EXCESSIVE MOISTURE
- ALGINATE OVERFLOW
- LEVELING INVERTED TRAY
- RATIO OF POWDER TO WATER
- IMMEDIATE POUR TO AVOID DETERIORATION OF ALGINATE IMPRESSION
- REMOVAL OF PLASTER MASS FROM LINGUAL FLANGE OF MANDIBULAR TRAY

SAFETY -- HAZARD

PLACE THUMB ON TRAY FOR STABILITY WHEN TRIMMING
HAZARD: LACERATION

HANDLE GLASS PLATES WITH DRY HANDS
HAZARD: SHATTERED GLASS, LACERATIONS

SCIENCE

PRINCIPAL
- POWDER & LIQUID MUST BE MEASURED FOR PROPER CONSISTENCY, STRENGTH & DURABILITY

SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE

CONCEPTS
- RATIO–PROPORTIONS BETWEEN POWDER & LIQUID
- POWDER–STRENGTH
- CONSISTENCY–LACK OF AIR BUBBLES ON OCCLUSION SURFACES OF TEETH
- DURABILITY–WITHSTAND DECOMPOSITION

MATH – NUMBER SYSTEMS

LIQUID & DRY MEASURES
- [MEASURE GRAMS OF POWDER]
- [MEASURE LITERS OF LIQUID]

MEASURE WITH THE METRIC AND ENGLISH SYSTEM AND CONVERT BETWEEN THEM

COMMUNICATIONS

(TASK STATEMENT) TRIM A DENTAL PLASTER MODEL (DIAGNOSTIC)

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
STONE MODEL MODEL TRIMMER CONTAINER WITH WATER CURING SOLUTION WET CLOTH (FOR POLISHING)	PREPARE MODEL FOR TRIMMING DO ROUGH TRIMMING TRIM MANDIBULAR MODEL PLACE OPPOSING MODEL IN OCCLUSION TRIM MAXILLARY MODEL TO MANDIBULAR MODEL IN SYMMETRIC FORM ALLOW MODEL TO DRY SOAK IN CURING SOLUTION POLISH FAILURE MODE TRYING TO TRIM ALL MODELS THE SAME FAILURE TO REMOVE DEBRIS FROM OCCLUSION SURFACE FOR OCCLUDING PARALLELING BASE TO OCCLUSAL PLANE	WEAR SAFETY GLASSES HAZARD: EYE INJURY
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
RESISTANCE OF MATERIALS TO CHANGE IN SHAPE (Examples: BENDING, TWISTING, STRETCHING) EFFECTS OF FRICTION OF WORK PROCESSES AND PRODUCT QUALITY (WATER NEEDED) SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE	MEASURES OF LENGTH (WITH THE EYE OR A RULER) DETERMINATION OF AREA OF TRIANGLES DETERMINATION OF AREA, PERIMETER AND DIAGONALS OF POLYGONS WITH MORE THAN FOUR SIDES IF MARKED ACCURACY NEEDED A BOLEY GAUGE CAN BE USED	READ–WRITTEN WORK ORDER, SCHEDULING ACCURACY TO SPECIFIED LEVELS FOLLOW DRAWN OUTLINE AS INDICATED BY DENTIST

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TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
STONE PLASTER LAB KNIFE VIBRATOR RUBBER BOWL FLEXIBLE SPATULA DRY BALANCE WET GRADUATE MEASURE WATER ALGINATE IMPRESSION	PREPARE IMPRESSION PREPARE PLASTER MIX FILL IMPRESSION DECISION HEIGHT OF PLASTER BASE FAILURE MODE AIR TRAPPED IN OCCLUSION SURFACE	
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
TRANSFER OF ENERGY FROM ONE FROM TO ANOTHER	MEASURE WITH THE METRIC AND ENGLISH SYSTEM AND CONVERT BETWEEN THEM MEASURES OF WEIGHT LIQUID & DRY MEASURES RATIO & PROPORTION	SCHEDULING

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(TASK STATEMENT) TRIM A STONE WORK MODEL

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
LAB TRIMMER STONE MODEL	TRIM MODEL BASE LEVEL TRIM ROUGH EDGES DECISION DEPTH OF BASE WIDTH OF PERIPHY	SAFETY GLASSES HAZARD: EYE INJURY TRIMMER HAZARD: FINGER ABRASION
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
RESISTANCE OF MATERIALS TO CHANGE IN SHAPE		

(TASK STATEMENT) ARTICULATE A MODEL

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
ARTICULATOR WAX BITE REGISTRATION FORM MODELS PLASTER WATER RUBBER BOWL SPATULA	SELECT APPROPRIATE ARTICULATOR PLACE & SECURE MODELS TO EACH ARM OF ARTICULATOR FAILURE MODE IMPROPER REGISTRATION OF BITE	

SCIENCE	MATH – NUMBER SYSTEMS	COMMUNICATIONS
ARRANGEMENT OF MOLECULES, ATOMS AND IONS AND THE EFFECT ON STRUCTURE AND STRENGTH OF MATERIALS	LIQUID & DRY MEASURES [GRAM SCALE/GRADUATED CYLINDER] MEASURE WITH THE METRIC AND ENGLISH SYSTEM AND CONVERT BETWEEN THEM [GRAMS & CUBIC CENTIMETERS]	

(TASK STATEMENT) CONSTRUCT A CUSTOM MADE TRAY

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
ACRYLIC LIQUID ACRYLIC POWDER INDELIBLE PENCIL LIQUID PROPORTIONER POWDER PROPORTIONER UNWAXED PAPER CUP MANDIBULAR & MAXILLARY MODEL BASE PLATE WAX TONGUE BLADE ACRYLIC BURS BENCH ENGINE BUNSEN BURNER LAB KNIFE NO. 7 SPATULA STRAIGHT HANDPIECE VASELINE	PREPARE MODEL FOR WAX ADD WAX TO MODEL MIX RESIN MATERIAL ADAPT THE MATERIAL TO CONFORM TO THE CONTOUR OF THE MODEL FORM HANDLE TRIM EXCESS MATERIAL FROM TRAY DECISION EVEN DISTRIBUTION OF MATERIAL PLACEMENT OF HANDLE PLACEMENT OF STOPS NECESSARY FAILURE MODE TRIMMING WAX ONLY TO THE PERIPHERY LEAVING ENOUGH MATERIAL FOR A HANDLE TRIMMING TRAY TO PROPER DIMENSIONS	PROTECT HANDS FROM ACRYLIC MATERIAL HAZARD: BURNS BE CAREFUL WITH FLAME HAZARD: BURNS OR FIRE BE CAREFUL WITH LAB KNIFE HAZARD: LACERATIONS CAREFUL USE OF HANDPIECE WITH BUR HAZARDS: LACERATION SAFETY GLASSES HAZARD: EYE INJURY
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
PRINCIPLE POWDER AND LIQUID MUST BE MEASURED FOR PROPER CONSISTENCY SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE EFFECT OF HEATING AND COOLING ON STATE OF MATTER (CHANGE OF MATTER FROM ONE FORM TO ANOTHER) TRANSFER OF ENERGY FROM ONE FORM TO ANOTHER (EXOTHERMIC REACTION–CHEMICAL REACTION YIELDING HEAT)	LIQUID & DRY MEASURES RATIO & PROPORTION	READ–LAB PRESCRIPTION OR PATIENT CHART

(TASK STATEMENT) CONSTRUCT A COMPOUND TRAY

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
CAKE COMPOUND COMPOUND HEATER LAB KNIFE EDENTULOUS MODELS BUNSEN BURNER VASELINE SPATULA	HEAT COMPOUND FORM COMPOUND ON MODEL TRIM TRAY SMOOTH DECISION HOW EXTENSIVE TO TRIM THE COMPOUND FAILURE MODE EXCESSIVE HEATING OF THE COMPOUND	BUNSEN BURNER & COMPOUND HEATER HAZARD: BURNS VASELINE HANDS HAZARD: BURNS KNIFE HAZARD: LACERATION
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
EFFECT OF HEATING AND COOLING ON STATE OF MATTER (CHANGE OF MATTER FROM ONE FORM TO ANOTHER)		

(TASK STATEMENT) FABRICATE A WAX BITE RIM

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
MODEL BOLEY GAUGE BUNSEN BURNER ALCOHOL TORCH BASE PLATE WAX SHEETS LAB KNIFE NO. 7 WAX SPATULA PAN & WATER THERMOMETER	PREPARE THE WAX PREPARE THE CAST APPLY THE WAX TRIM WAX SMOOTH PERIPHERIES DECISION AMOUNT OF THE WAX STRIP TO SOFTEN AMOUNT OF TRIMMING NECESSARY FAILURE MODE OVERHEATING OF WAX STRIPS TRAPPING POCKETS OF AIR BETWEEN THE STRIPS INCONSISTANT WATER TEMPERATURE	BUNSEN BURNER OR ALCOHOL TORCH HOT WAX HAZARD: BURNS

SCIENCE	MATH – NUMBER SYSTEMS	COMMUNICATIONS
EFFECT OF HEATING AND COOLING ON STATE OF MATTER (CHANGE OF MATTER FROM ONE FORM TO ANOTHER) SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE RESISTANCE OF MATERIALS TO CHANGE IN SHAPE	MEASURE WITH THE METRIC AND ENGLISH SYSTEM AND CONVERT BETWEEN THEM MEASURES OF LENGTH	

(TASK STATEMENT) CONSTRUCT A SHELLAC BASE PLATE

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
ALCOHOL TORCH LABORATORY SHEARS STONE MODELS SHELLAC BASE PLATE BLANKS VASELINE NO. 7 WAX SPATULA BOWL AND WATER	PREPARE THE MODEL APPLY SHELLAC TRIM MATERIAL SMOOTH PERIPHERY DECISION LENGTH OF TIME FOR HEATING SHELLAC FAILURE MODE EXCESSIVE TRIM	ALCOHOL TORCH HOT SHELLAC HAZARD: BURNS
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
ARRANGEMENT OF MOLECULES, ATOMS AND IONS AND THE EFFECT ON STRUCTURE AND STRENGTH OF MATERIALS (SHELLAC BEING INSOLUBLE WITH VASELINE) SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE	MEASURE WITH THE METRIC AND ENGLISH SYSTEM AND CONVERT BETWEEN THEM	READ LAB PRESCRIPTION

(TASK STATEMENT) PREPARE COPPER TUBE FOR IMPRESSION

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
COPPER TUBE RED COMPOUND WAX BUNSEN BURNER PAN OF WATER BURNISHER LAB KNIFE CURVED SCISSORS	PREPARE AND ADAPT TUBE PREPARE WAX AND FILL TUBE CUES TRIM WAX OVERFLOW BURNISH CUT EDGES DECISION TRIMMING WAX	BURNISH CUT EDGES HAZARD: TISSUE LACERATION KNIFE HAZARD: LACERATION

SCIENCE	MATH – NUMBER SYSTEMS	COMMUNICATIONS
EFFECT OF HEATING AND COOLING ON EXPANSION OF MATERIALS (CHANGE OF DIMENSIONS) EFFECT OF HEATING AND COOLING ON STATE OF MATTER (CHANGE OF MATTER FROM ONE FORM TO ANOTHER)		SCHEDULING

(TASK STATEMENT) CONSTRUCT AN ACRYLIC TEMPORARY

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
ACRYLIC LIQUID ACRYLIC POWDER SPATULA PAPER CONTAINER ALGINATE IMPRESSION ACRYLIC BURS MANDREL SAND DISKS VACUUM MOLDING MACHINE (NEW OR USED)	PREPARE IMPRESSION MIX AND FILL KEY TEETH IMPRESSION TRIM AND POLISH DECISION AMOUNT OF POLYMER & MONOMER TO USE TIME INVOLVED IN MIXING FAILURE MODE SHY MARGINS	CHEMICAL MIX HAZARD: FUMES, TISSUE BURN TRIM HAZARD: ABRASION
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
COMPOSITION OF MATTER, INCLUDING PROTONS, NEUTRONS, ELECTRONS, ATOMS, MOLECULES, ELEMENTS TRANSFER OF ENERGY FROM ONE FORM TO ANOTHER EFFECT OF HEATING AND COOLING ON STATE OF MATTER (CHANGE OF MATTER FROM ONE FORM TO ANOTHER) ARRANGEMENT OF MOLECULES, ATOMS AND IONS AND THE EFFECT ON STRUCTURE AND STRENGTH OF MATERIALS [POLYMERIZATION] SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE	VISUAL MEASUREMENTS RATIO & PROPORTION	SCHEDULING

(TASK STATEMENT) PREPARE A WAX PATTERN

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
ARTICULATED MODEL BRUSH BUNSEN BURNER DIE FORM HOLLENBACK CARVER NO. 3 OR ROACH CARVER INLAY WAX PLIERS 110 SR NO. 7 WAX SPATULA SEPARATING MEDIUM NYLON MATERIAL COTTON TIPPED APPLICATOR	PREPARE THE MODEL ADD WAX TO PREPARED TOOTH CARVE THE WAX PATTERN SMOOTH AND POLISH WAX PATTERNS DECISION HOW MUCH WAX TO ADD HOW MUCH WAX TO CARVE FOR OCCLUSION FAILURE MODE ELIMINATION OF A SEPARATING MEDIUM EXCESS WAX EXTENSIVE OR INADEQUATE CARVING	BUNSEN BURNER HAZARD: BURNS OR FIRE HOT INSTRUMENTS OR HOT WAX HAZARD: BURN SAFETY GLASSES HAZARD: EYE INJURY

SCIENCE	MATH – NUMBER SYSTEMS	COMMUNICATIONS
RESISTANCE OF MATERIALS TO CHANGE IN SHAPE. (Examples: BENDING, TWISTING, STRETCHING.) EFFECT OF HEATING AND COOLING ON STATE OF MATTER (CHANGE OF MATTER FROM ONE FORM TO ANOTHER) SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE		

(TASK STATEMENT) SPRUE A WAX PATTERN

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
SPRUES FINISHED WAX PATTERN WAX CLEANING SOLUTION SPRUE MOUNT FILLED WITH UTILITY WAX NEEDLE-NOSE PLIERS BUNSEN BURNER CAMEL HAIR BRUSH (SIZE 6)	HEAT SPRUE & ATTACH TO PATTERN PLACE SPRUED PATTERN ON MOUNT PAINT WITH CLEANING SOLUTION NEXT STEP INVESTING DECISION WHERE TO PLACE THE SPRUE PIN SELECT PROPER SPRUE FAILURE MODE SELECTING IMPROPER SPRUE ATTACHING SPRUE TO WRONG AREA NOT CLEANING ALL CONTAMINATED AREAS	DO NOT TOUCH HEATED SPRUE BE CAREFUL OF FLAME HAZARD: BURN, FIRE

SCIENCE	MATH – NUMBER SYSTEMS	COMMUNICATIONS
EFFECT OF HEATING AND COOLING ON EXPANSION OF MATERIALS (CHANGE OF DIMENSIONS) FORCES ACTING ON A BODY IMMERSED OR FLOATING IN A LIQUID TRANSFER OF HEAT FROM ONE BODY TO ANOTHER RELATIONSHIP OF FORCE TO DISTORTION IN AN ELASTIC BODY SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE		

(TASK STATEMENT) HAND INVEST A WAX PATTERN

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
CASTING RING INVESTMENT PLASTER (CRISTOBALITE) DISTILLED WATER ASBESTOS STRIP TWO BRUSHES (ARTIST STYLE) SPRUED WAX PATTERN ON FORMER LIQUID GRADUATE MEASURER MECHANICAL SPATULATOR AND BOWL SMALL INSTRUMENT FOR APPLYING PLASTER VIBRATOR UTILITY WAX	SELECT AND PREPARE CASTING RING MIX INVESTMENT MATERIAL AND BRUSH ON MOUNTED PATTERN FIT CASTING RING TO SPRUE MOUNT WITH UTILITY WAX USE INSTRUMENT TO APPLY INVESTMENT MIX TO CASTING RING WHILE VIBRATING DECISION PROPER SIZING CASTING RING FAILURE MODE IMPROPER SIZING OF CASTING RING OMITTING ASBESTOS FAILURE OF EXPANSION SPACE TRAPPING AIR UNDER INVESTMENT NEXT TO PATTERN TRAPPING AIR WHEN FILLING CASTING RING SEPARATION OF PATTERN FROM SPRUE	

SCIENCE	MATH – NUMBER SYSTEMS	COMMUNICATIONS
EFFECT OF HEATING AND COOLING ON EXPANSION OF MATERIALS TRANSFER OF HEAT FROM ONE BODY TO ANOTHER SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE	LIQUID AND DRY MEASURES DETERMINATION OF THE AREA OF RINGS RATIO AND PROPORTION DETERMINATION OF AREA AND VOLUME OF CYLINDERS	SCHEDULING

(TASK STATEMENT) CAST GOLD ALLOY

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
GOLD ALLOY CENTRIFUGAL CASTING MACHINE TORCH TONGS BUNSEN BUENER FLUX KNIFE BURN OUT OVEN INVESTED CASE ON SPRUE BASE CRUCIBLE ASBESTOS PAN OF WATER	ELIMINATE THE WAX PATTERN CAST GOLD ALLOY DECISION SELECTING CORRECT AMOUNT OF GOLD ALLOY SELECTION OF RIGHT TEMPERATURE ON BURN OUT OVEN AND TIMING OF BURN-OUT SELECTION OF CORRECT WINDING OF CENTRIFUGAL CASTING MACHINE ESTIMATING CORRECT TIME TO QUENCH FAILURE MODE BLOCKING OF EGRESS IN INVESTED CASE SOLIDIFYING OF METAL PRIOR TO COVERAGE OF PATTERN INCORRECT TIMING OF QUENCHING SELECTION OF INCORRECT AMOUNT OF ALLOY RESULTING IN INADEQUATE PRODUCT INCORRECT WINDING OF CENTRIFUGAL CASTING MACHINE RESULTING IN INADEQUATE CASTING	SAFETY GLASSES HAZARD: EYE INJURY KNIFE HAZARD: LACERATIONS QUENCHING HAZARD: WATER EXPLOSION BLACKING OF ARM ON CENTRIFUGAL MACHINE HAZARD: THROWING MOLTEN METAL AROUND
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
EFFECT OF HEATING AND COOLING ON STATE OF MATTER (CHANGE OF MATTER FROM ONE FORM TO ANOTHER) CENTRIFUGAL FORCES DEVELOPED BY BODIES IN ROTATION (Example: FORCE TENDING TO DISCHARGE MATERIAL FROM A ROTATING BODY) SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE	MEASURES OF WEIGHT (GOLD) MEASURES OF TIME AND SPEED. (Examples: TIME – SECONDS, MINUTES, ETC.; SPEED – FEET PER MINUTE, R.P.M., ETC.) MEASURES OF TEMPERATURE	SCHEDULING

(TASK STATEMENT) PICKLE AND FINISH CAST GOLD ALLOY

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
PICKLING PAN PICKLING SOLUTION PAN WITH WATER TWEEZERS BRUSH (SCRUB) BUNSEN BURNER AND TRIPOD BENCH ENGINE BURNISHER COTTON FINISHING BURS FINISHING STONES HANDPIECE & LAB ENGINE MANDRELS ROUGE RUBBER WHEELS SEPARATING DISK SMALL WHEELS SOAP BRUSH (SOFT) TRIPOLI	REMOVE METAL OXIDATION REMOVE BUTTON, FINISH AND BURNISH SURFACES DECISION LENGTH OF TIME FOR HEATING SOLUTION SMOOTH SHINY SURFACE EXCERCISE CARE TO KEEP OFF MARGINS FAILURE MODE BURNISHING MARGINS	SAFETY GLASSES HAZARD: EYE INJURY PICKLING SOLUTION HAZARD: FUMES, CHEMICAL BURNS ON SKIN & CLOTHES FRICTION HAZARD: BURN
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
TRANSFER OF HEAT FROM ONE BODY TO ANOTHER PRINCIPLES OF OXIDATION SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE	MEASURES OF TEMPERATURE LIQUID AND DRY MEASURES	SCHEDULING OF PATIENT

(TASK STATEMENT) REPLACE A TOOTH IN A DENTURE

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
DENTURE DENTURE TOOTH DENTAL ENGINE STRAIGHT HANDPIECE BURS WAX ACRYLIC LIQUID ACRYLIC POWDER DRY MEASURER LIQUID MEASURER PLASTER LATHE RAG WHEELS PUMICE POLISHING AGENT	REMOVE THE FRACTURED TOOTH STUMP SELECT OF TOOTH SHADE AND MOLD FOR THE REPAIR REPLACEMENT OF THE TOOTH WITH A SELF-CURING ACRYLIC POLISH THE REPAIR DECISION PROPER TOOTH FOR REPLACEMENT FAILURE MODE REMOVAL FROM THE LABIAL RATHER THAN THE LINQUAL SIDE IMPROPER TOOTH PLACEMENT	TRIM HAZARD: EYE INJURY, ABRASIONS ACRYLIC HAZARD: BURNS PLACEMENT OF TOOTH HAZARD: IMPROPER OCCLUSION NEEDS DENTIST'S ATTENTION

SCIENCE	MATH – NUMBER SYSTEMS	COMMUNICATIONS
WORK INPUT, WORK OUTPUT, FRICTION AND EFFICIENCY IN SIMPLE MACHINES EFFECT OF HEATING AND COOLING ON STATE OF MATTER (CHANGE OF MATTER FROM ONE FORM TO ANOTHER) ARRANGEMENT OF MOLECULES, ATOMS AND IONS AND THE EFFECT ON STRUCTURE AND STRENGTH OF MATERIALS EFFECTS OF FRICTION ON WORK PROCESSES AND PRODUCT QUALITY EFFECT OF HEATING AND COOLING ON EXPANSION OF MATERIALS (CHANGE OF DIMENSIONS) SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE	LIQUID AND DRY MEASURES	WRITING–LAB R_x FROM DOCTOR CHECKING BEFORE POLISHING VERBAL–ORDER FROM DOCTOR CRITICAL CRITIQUE FROM DOCTOR AFTER COMPLETION OF TASK

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
DENTURE BOWL WITH WATER BRUSH DENTAL LATHE FINALUSTRE PUMICE 3 RAG WHEELS SOAP SPLASH PAN TAPERED CHUCK TRIPOLI	GRIP DENTURE TIGHTLY APPLY WET PUMICE TO THE DENTURE APPLY TRIPOLI TO THE DENTURE APPLY FINAL LUSTER TO DENTURE GIVE FINAL SMOOTHNESS AND POLISH DECISIONS ABSENSE OF SCRATCHES AFTER APPLICATION OF EACH FAILURE MODE LOOSE GRIP ON DENTURE LEAVING ROUGH AREAS	FLYING DENTURE OR MATERIALS HAZARD: INJURY FRACTURE DENTURE SAFETY GLASSES HAZARD: EYE INJURY ROUGH AREAS HAZARD: TISSUE TRAUMA

SCIENCE	MATH – NUMBER SYSTEMS	COMMUNICATIONS
EFFECTS OF FRICTION ON WORK PROCESSES AND PRODUCT QUALITY RESISTANCE OF MATERIALS TO CHANGE IN SHAPE (Examples: BENDING, TWISTING, STRETCHING) INERTIA AND MOMENTUM (BODY AT REST AND BODY IN MOTION) COMPOSITION OF MATTER, INCLUDING PROTONS, NEUTRONS, ELECTRONS, ATOMS, MOLECULES, ELEMENTS WORK INPUT, WORK OUTPUT, FRICTION AND EFFICIENCY IN SIMPLE MACHINES CENTRIFUGAL FORCES DEVELOPED BY BODIES IN ROTATION (Example: FORCE TENDING TO DISCHARGE MATERIAL FROM A ROTATING BODY) SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE	MEASUREMENTS [METRIC]	VERBAL–DOCTOR'S ORDERS READ LAB PRESCRIPTION SCHEDULING

(TASK STATEMENT) PROCESS AN ACRYLIC RETAINER

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
LAB R_x POLYMER MONOMER GAUGE WIRE CONTOUR PLIERS WORK MODEL CONTAINER OF HOT WATER HOT PLATE LAB ENGINE STRAIGHT HAND PIECE BURS	PREPARE MODEL FOR ACRYLIC PREPARE WIRE FRAME WORK PREPARE ACRYLIC MIX AND APPLY TO WORK MODEL CURE TRIM AND FINISH DECISION THICKNESS OF ACRYLIC AMOUNT OF MIX PLACEMENT OF METAL RESTS FAILURE MODE INACCURATE MARGINS MISINTERPRETATION OF WORK ORDER	CHEMICAL MIX HAZARD: FUMES TRIM HAZARD: ABRASIONS & LACERATIONS WIRE FOUNDATION HAZARD: PUNCTURE WOUNDS
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
SIMPLE MACHINES USED TO GAIN MECHANICAL ADVANTAGE EFFECT OF HEATING AND COOLING ON STATE OF MATTER (CHANGE OF MATTER FROM ONE FORM TO ANOTHER) TRANSFER OF ENERGY FROM ONE FORM TO ANOTHER ARRANGEMENT OF MOLECULES, ATOMS AND IONS AND THE EFFECT ON STRUCTURE AND STRENGTH OF MATERIALS [POLYMERIZATION] RESISTANCE OF MATERIALS TO CHANGE IN SHAPE	VISUAL MEASUREMENT RATIO AND PROPORTION	READ LAB PRESCRIPTION SCHEDULING

(TASK STATEMENT) SIZE ORTHODONTIC BANDS

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
VARIOUS ORTHODONTIC BANDS MODEL OF PATIENT'S TEETH LIQUID METAL WORK ORDER PLASTER WATER RUBBER BOWL SPATULA BASE RUBBER MOLD INSTRUMENTS CONTOUR PLIERS	PREPARE MODEL FOR BANDING PLACE ON BASE COAT WITH METAL CONTOUR BANDS PLACE BANDS FOR SIZING FAILURE MODE INACCURATE SIZE DUE TO INCORRECT PREPARATION OF MODEL	CAREFUL HANDLING OF BANDS AND INSTRUMENTS HAZARD: HAND WOUNDS
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
RESISTANCE OF MATERIALS TO CHANGE IN SHAPE	GIVEN A CODING SYSTEM, RECOGNIZE AND IDENTIFY EACH UNIT INVOLVED BY ASSIGNING NECESSARY SYMBOLS, NUMERICAL OR LITERAL [BAND SIZE CODING] RESISTANCE OF MATERIALS TO CHANGE IN SHAPE (Examples: BENDING, TWISTING, STRETCHING) [BAND SHAPE] DETERMINATION OF AREA & VOLUME OF CYLINDERS [SELECTING SIZE TO MODEL]	READING COMPREHENSION–INTERPRET WORK ORDER

Duty F Performing Dental Office Management Duties

1 Prepare reception room for patients
2 Sort, open and route mail
3 Pull or file patients' dental records
4 Receive patients
5 Manage children accompanying patients
6 Screen non-patient visitors
7 Complete registration form and health history record
8 Explain to scheduled patients unexpected delay
9 Place telephone calls
10 Answer telephone calls
11 Answer emergency telephone calls
12 Schedule apppointments for patients
13 Make arrangements for patient admission to hospital
14 Arrange meetings and/or conferences
15 Arrange travel accommodations
16 Prepare schedule for dentist of hospital patients
17 Operate typewriter and assume responsibility for maintenance
18 Transcribe from a dictating machine
19 Operate copy equipment
20 Compose and type a business letter
21 Type a consultation letter
22 Compose and type a recall letter to patient
23 Type and compose collection letter
24 Complete workmen's compensation forms
25 Complete commercial health forms
26 Complete medicare part B forms
27 Complete public assistance billing forms
28 Inventory office supplies
29 Order and receive office supplies
30 Complete inventory of supplies (expendable)

(TASK STATEMENT) PREPARE RECEPTION ROOM FOR PATIENTS

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
MAGAZINES APPROPRIATE TO INDIVIDUAL PRACTICE TABLES CHAIRS LAMPS ASH TRAYS (OPTIONAL)	SCREEN MAGAZINES ALIGN FURNITURE NECESSARY CLEAN-UP MAINTAIN COMFORTABLE TEMPERATURE, IF POSSIBLE FRESH AIR CIRCULATION CUES OVERALL CLEAN, PLEASANT ATMOSPHERE SHOULD BE MAINTAINED AT ALL TIMES PROPER LIGHTING STALE ODORS DECISIONS TYPE MAGAZINES FOR PLACEMENT	SAFETY: MAINTAIN CONSTANT ALERTNESS FOR ANY DAMAGED FURNITURE, PROTRUDING OBJECTS, LOOSE OR FRAYED ELECTRICAL CORDS HAZARD: INJURY TO PATIENT AND/OR STAFF SAFETY: FLOOR AREA KEPT SMOOTH & UNCLUTTERED HAZARD: DANGER OF TRIPPING
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**

(TASK STATEMENT) SORT, OPEN AND ROUTE MAIL

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
LETTER OPENER FILE NO. 13	SPEARATE FIRST CLASS MAIL AND PERSONAL MAIL CATEGORIZE BALANCE OF MAIL ATTACH COMMUNICATIONS REGARDING PATIENTS TO APPROPRIATE CHART FOR DENTIST'S ATTENTION SORT & DISPOSE OF DRUG SAMPLES PER DENTIST'S DESIRES ANSWER APPROPRIATE MAIL FILE INCOMING BILLS FOR PAYMENT CUES PAY CAREFUL ATTENTION TO MAIL CONTAINING PAYMENTS	SAFETY DRUGS MUST BE KEPT IN AREA ACCESSIBLE TO STAFF ONLY HAZARD IMPROPER USE
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
		WRITTEN–TO PATIENTS INTER-OFFICE MAIL

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TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
FILE CABINET CHARTS TYPEWRITER APPOINTMENT SCHEDULE	LOCATE CHART AND REMOVE FROM FILE TYPE LIST OF PATIENTS SCHEDULED REPLACE IN PROPER ORDER AFTER USE CUES FILING MAY BE DONE ALPHABETICALLY OR NUMERICALLY CHECK FOLDER TO BE CERTAIN ALL CURRENT DATA IS FILED PREPARE NEW SHEET FOR NOTES BY DENTIST IF NO ROOM IN CHART	SAFETY: OPEN ONLY ONE DRAWER AT A TIME HAZARD: DANGER OF ENTIRE CABINET TIPPING WITH RESULTANT POSSIBLE TRAUMA ACCURATE FILING HAZARD: LOSS OF PATIENT'S CHART FOR A TIME
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
	LOCATE BY APPROXIMATION RATIONAL NUMBERS AND INTEGERS ON THE NUMBER LINE (SEQUENTIAL ORDERING)	WRITTEN–SCHEDULED LIST OF PATIENTS

(TASK STATEMENT) RECEIVE PATIENTS

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
STANDARD OFFICE SUPPLIES DAILY PRACTICE LOG	WELCOME PATIENT BY NAME PROVIDE FOR PATIENT'S COMFORT & EASE MEET INDIVIDUAL NEEDS AS REQUIRED DECISION AT WHAT POINT IT IS ADVISABLE TO SEE A PATIENT AHEAD OF THOSE ALREADY WAITING CUES INCOMPLETED CHARTS	HEALTH HISTORY HAZARD FAILURE TO RECORD CURRENT OR PAST HEALTH PROBLEMS
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
ELICIT PATIENT NEEDS THROUGH COMPETENT AND CARING MANNER		LISTENING & WATCHING FOR PATIENT'S NEEDS VERBAL & NON-VERBAL–PROVIDE COMFORT AND ASSISTANCE

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
ASSORTMENT OF APPROPRIATE BOOKS AND TOYS STORAGE AREA FOR BOOKS AND TOYS CHILDREN'S FURNITURE (OPTIONAL)	CARE OF CHILD IN SOME INSTANCES DECISION DETERMINATION OF POINT AT WHICH CHILD HAS BECOME DISRUPTIVE AND APPROPRIATE ACTION TO TAKE	SAFETY: HAZARDLESS TOYS SAFETY: GUARD AGAINST TOYS IN WALKING AREA HAZARD: POSSIBLE INJURY TO CHILD OR OTHER VISITOR
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
HUMAN RELATIONS		VERBAL INTERACTION WITH CHILD & PATIENT TACIT COMMUNICATION WITH CHILD TACIT COMMUNICATION WITH PARENT

(TASK STATEMENT) SCREEN NON-PATIENT VISITORS

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
APPOINTMENT BOOK (IF NEEDED) WRITING INSTRUMENT	SCHEDULE FUTURE APPOINTMENTS PER DENTIST'S WISHES ESCORT VISITORS TO BE SEEN INTO APPROPRIATE WAITING AREA CUES VISITORS WILL FIT INTO VARIOUS CATEGORIES AND WILL BE DEALT WITH IN INDIVIDUAL MANNER ACCORDING TO WISHES OF DENTIST	INAPPROPRIATE SCREENING HAZARD: LOSS OF VAUABLE WORKING TIME
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
HUMAN RELATIONS	MEASURES OF TIME AND SPEED. (Examples: TIME–SECONDS, MINUTES, ETC.; SPEED–FEET PER MINUTE, R.P.M.; ETC.)	VERBAL–INTERACTION WITH VISITORS AND WITH DENTIST RECORDING APPOINTMENTS

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TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
CHART FOLDER REGISTRATION FORM HISTORY SHEET WRITING MATERIAL WRITING SURFACE	COMPLETE HISTORY SHEET ACCORDING TO DENTIST'S INSTRUCTIONS COMPLETE REGISTRATION FORM AS INDICATED CUES ASCERTAIN CORRECT SPELLING OF NAME & COMPLETE ADDRESS FINANCIAL INFORMATION AS COMPLETE AS POSSIBLE ALL BLANK AREAS OF HEALTH HISTORY ARE FILLED	MARK HEALTH PROBLEMS FOR ATTENTION HAZARD: OVERSIGHT OF ALLERGY, ETC.
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
HUMAN RELATIONS		TALKING WITH PATIENT AND/OR RELATIVES RECORDING

(TASK STATEMENT) EXPLAIN TO SCHEDULED PATIENTS UNEXPECTED DELAY

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
TELEPHONE (IF INDICATED) APPOINTMENT BOOK WRITING INSTRUMENT	RESCHEDULE APPOINTMENTS AS INDICATED CUE GIVE PATIENTS BEST POSSIBLE ALTERNATE APPOINTMENT	IMPROPER HANDLING OF RESCHEDULING HAZARD: LOSS OF PATIENT
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
HUMAN RELATIONS	MEASURE OF TIME AND SPEED (Example: TIME–SECONDS, MINUTES, ETC.; SPEED–FEET PER MINUTE, R.P.M.; ETC.)	VERBAL INTERACTION WITH PATIENT INSTRUCTIONS FROM DENTIST CUES APOLOGIZE FOR DELAY ATTEMPTS SHOULD BE MADE TO COINCIDE PATIENT'S TIME WITH NEW SCHEDULING RECORDING IN APPOINTMENT BOOK COMPLETION OF APPOINTMENT CARD

(TASK STATEMENT) PLACE TELEPHONE CALLS

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
TELEPHONE BOOK TELEPHONE INDEX WRITING MATERIALS	USE TELEPHONE BOOK PROPER VOICE MODULATION & DICTION PROPER POSITION OF RECEIVER CUES IF CALL PLACED FOR DENTIST PERSONALLY, HE/SHE SHOULD BE READILY AVAILABLE NO GUM, FOOD OR OBJECTS IN MOUTH OF ASSISTANT	
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
MANNER DENOTES DEGREE OF COMPETENCE HUMAN RELATIONS		SPEAKING CLEARLY & CONCISELY

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(TASK STATEMENT) ANSWER TELEPHONE CALLS

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
WRITING MATERIALS APPOINTMENT BOOK COMPLETE DIRECTORY OF COMMUNITY AGENCIES RECORD FOR RECORDING INCOMING CALLS	TRANSMIT INFORMATION, CHECK RESOURCES AS NECESSARY SCHEDULE APPOINTMENTS RECORD MESSAGES FOR PROPER RESPONSE BY DENTIST SCREEN CALLS, I.E., THOSE ASSISTANT CAN ANSWER AND THOSE DENTIST MUST ANSWER RECORD PERTINENT INFORMATION ON PATIENT RECORD CUES NEVER HAVE FOOD, GUM OR OBJECTS IN MOUTH AVOID IMPROPER VOICE TONE BE AWARE OF OFFICE POLICY AND/OR DENTIST'S PREFERENCE BE AWARE OF DENTAL LEGAL IMPLICATIONS OF GIVING INFORMATION OVER TELEPHONE BE SURE TO RECORD ALL PERTINENT INFORMATION	INACCURATE RECORDING OF INFORMATION HAZARD: FAILURE TO RE-PLACE CALLS
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
MANNER DENOTES DEGREE OF COMPETENCE HUMAN RELATIONS		QUESTION VERBALLY TO DETERMINE CALLER'S NEEDS RECORD MESSAGES RECORD APPOINTMENTS RECORD PERTINENT DATA ON PATIENT'S RECORD

(TASK STATEMENT) ANSWER EMERGENCY TELEPHONE CALLS

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
WRITING MATERIALS APPOINTMENT BOOK COMPLETE DIRECTORY OF COMMUNITY AGENCIES RECORD FOR RECORDING INCOMING CALLS	HANDLE ON INDIVIDUAL MERIT RECORD CALL DECISIONS QUESTION CALLER UNTIL TRUE SITUATION IS ASCERTAINED & TAKE PROMPT ACTION ACCORDINGLY IF SEVERE EMERGENCY DIRECT PATIENT TO EMERGENCY ROOM (IF DENTIST NOT AVAILABLE) OFFER APPROPRIATE FIRST AID ADVICE IF DENTIST IS NOT AVAILABLE (NOTE: AWARENESS OF MEDICAL LEGAL IMPLICATIONS) CUE VOICE MUST REMAIN CALM	BEING UNAWARE OF OWN LIMITATIONS HAZARD: LEGAL IMPLICATIONS

SCIENCE	MATH – NUMBER SYSTEMS	COMMUNICATIONS
MANNER DENOTES DEGREE OF COMPETENCE HUMAN RELATIONS		PHONE COMMUNICATION LOG IMMEDIATELY & ACCURACTELY ALL EMERGENCY CALLS

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
WRITING SURFACE APPOINTMENT BOOK W[illegible] MATERIAL	RECORD ON PROPER DATE & TIME IN APPOINTMENT BOOK APPOINTMENT CARD COMPLETED & GIVEN OR MAILED TO PATIENT DECISION DETERMINE TIME OF APPOINTMENT ACCORDING TO PATIENT'S NEEDS & DENTIST'S SCHEDULE ALLOT PROPER TIME INTERVAL FOR APPOINTMENT	INACCURATE RECORDING OF APPOINTMENT HAZARD: UNHAPPY PATIENT, DENTIST, JAMMED SCHEDULE
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
HUMAN RELATIONS	MEASURE OF TIME AND SPEED (Examples: TIME--SECONDS, MINUTES, ETC.; SPEED–FEET PER MINUTE, R.P.M., ETC.)	TALK AND/OR WRITE PATIENTS AND DENTIST RECORDI[illegible] DATA ON APPOINTMENT CARD & BOOK

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
PATIENT CHART TELEPHONE WRITING INSTRUMENT	PLACE CALL SCHEDULE ADMISSION PATIENT NOTIFICATION AND INSTRUCTION	
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
HUMAN RELATIONS		TALK WITH ADMISSION OFFICE PERSONNEL TALK WITH DENTIST AND PATIENT RECORD ON PATIENT CHART

(TASK STATEMENT) ARRANGE MEETINGS AND/OR CONFERENCES

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
STANDARD OFFICE SUPPLIES AS INDICATED BY INDIVIDUAL SITUATION–VARIES TO A GREAT DEGREE CALENDAR/APPOINTMENT BOOK	EFFICIENT MANAGEMENT OF INDIVIDUAL SITUATION	
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
	VARIED DEPENDING ON SITUATION	VERBAL INTERACTION WITH DENTIST RECORD ARRANGEMENTS COMPLETED WRITING TO AND/OR TALKING WITH OTHERS

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(TASK STATEMENT) ARRANGE TRAVEL ACCOMMODATIONS

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
STANDARD OFFICE SUPPLIES TYPEWRITER TELEPHONE	COMPLETE ARRANGEMENTS, USE PHONE/MAIL CUES MAKE CERTAIN OF DATES, TIMES, COSTS AND KINDS OF ACCOMMODATIONS DECISIONS TAX DEDUCTABLE	INACCURATE RECORDING OF DATES, TIMES, ETC. HAZARD: INABILITY TO COMPLETE TRAVEL
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
HUMAN RELATIONS		CORRESPOND AND/OR TALK WITH DENTIST AND OTHERS RECORD ACCURATELY THE ARRANGEMENTS MADE

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(TASK STATEMENT) PREPARE SCHEDULE FOR DENTIST OF HOSPITAL PATIENTS

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
STANDARD OFFICE SUPPLIES APPOINTMENT BOOK	TYPE PER WISHES OF DENTIST, I.E., FREQUENCY OF PREPARATION AND ORDER & TYPE OF INFORMATION CUE LIST SHOULD INCLUDE ANY FACTORS WHICH WOULD FACILITATE PATIENT CARE AND EFFICIENTLY UTILIZE DENTIST'S TIME	
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
		VERBAL AND WRITTEN TO AND FROM DENTIST VERBAL COMMUNICATION WITH HOSPITAL

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TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
STANDARD OFFICE SUPPLIES AS APPLIED TO TYPEWRITER MAINTENANCE, I.E., TYPEWRITER BRUSH, CLEANING FLUID, ETC.	BE FAMILIAR WITH ALL MOVING PARTS TYPING ON BOTH MANUAL AND ELECTRIC TYPEWRITERS DECISION AT WHAT POINT PROFESSIONAL MAINTENANCE IS NECESSARY CUES HAVE APPROPRIATE MANUAL READILY AVAILABLE	
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
		READING AND/OR VERBAL

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(TASK STATEMENT) TRANSCRIBE FROM A DICTATING MACHINE

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
TYPEWRITER STANDARD OFFICE SUPPLIES DICTATION TRANSCRIBER OTHERS AS SITUATION INDICATES, I.E., PATIENT CHART DICTIONARIES (MEDICAL AND REGULAR)	OPERATE DICTATING MACHINE SET UP & TYPE OUTPUT AS INDICATED FROM TRANSCRIBER CUES COMPLETE ACCURACY	
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
		LISTENING TO TRANSCRIBER TYPING FROM DICTATED TAPE DENTAL TERMINOLOGY

(TASK STATEMENT) OPERATE COPY EQUIPMENT

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
STANDARD OFFICE SUPPLIES AS APPLIED TO INDIVIDUAL EQUIPMENT	WILL VARY WITH TYPE OF MACHINE UTILIZED USE OPERATIONAL MANUAL DECISION AT WHAT POINT TO CALL PROFESSIONAL MAINTENANCE TO PREVENT TOTAL BREAKDOWN OF EQUIPMENT CUES HAVE APPROPRIATE MANUAL READILY AVAILABLE	SAFETY: IF FLUID USED IN COPY MACHINE, USE CARE IN HANDLING HAZARD: STAIN DAMAGE
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
EFFECT OF HEATING AND COOLING ON STATE OF MATTER (CHANGE OF MATTER FROM ONE FORM TO ANOTHER) [EFFECTS OF HEAT AND/OR LIGHT ON SOME COPY PAPER]	LOCATE BY APPROXIMATION RATIONAL NUMBERS AND INTEGERS ON THE NUMBER LINE (SEQUENTIAL ORDERING) GIVEN AN INSTRUMENT OF MEASURE, DETERMINE PRECISION AND/OR ACCURACY WITH RESPECT TO RELATIVE ERROR, SIGNIFICANT DIGITS AND TOLERANCE	READ MANUAL

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(TASK STATEMENT) COMPOSE AND TYPE A BUSINESS LETTER

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
TYPEWRITER STANDARD OFFICE SUPPLIES DICTIONARY OTHERS AS INDICATED ORDER BOOKS TELEPHONE BOOKS APPROPRIATE DIRECTORY	SET UP AND TYPE LETTER AS SITUATION INDICATES ADDRESS ENVELOPE CORRECTLY DECISION PROPER PHRASEOLOGY PROPER PERFORMANCE INTERVAL CUES MUST BE CLEAR, CONCISE AND ACCURATE	
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
	ADDITION AND SUBTRACTION OF WHOLE NUMBERS MULTIPLICATION AND DIVISION WITH WHOLE NUMBERS ADDITION AND SUBTACTION OF DECIMAL FRACTIONS MULTIPLICATION AND DIVISION OF DECIMAL FRACTIONS	WRITE AS INDICATED WITH PARTICULAR ADDRESSEE ORAL INTERACTION WITH DENTIST

(TASK STATEMENT) TYPE A CONSULTATION LETTER

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
TYPEWRITER STANDARD OFFICE SUPPLIES PATIENT CHART DICTIONARIES	SET UP AND TYPE LETTER AS SITUATION INDICATED ADDRESS ENVELOPE CORRECTLY CUE GOOD FORMAT AND COMPLETE ACCURACY CRITICAL	
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
		WRITTEN OR ORAL COMMUNICATION WITH DENTIST WRITE LETTER DENTAL TERMINOLOGY

(TASK STATEMENT) COMPOSE AND TYPE A RECALL LETTER TO PATIENT

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
TYPEWRITER STANDARD OFFICE SUPPLIES DICTIONARY PATIENT CHART	SET UP & TYPE LETTER AS SITUATION INDICATES AND AT PROPER INTERVAL ACCORDING TO DENTIST'S POLICY ADDRESS ENVELOPE CORRECTLY DECISION PROPER PHRASEOLOGY	
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
HUMAN RELATIONS		WRITE TO PATIENT

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TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
TYPEWRITER STANDARD OFFICE SUPPLIES DICTIONARY ACCOUNT CARD PATIENT'S CHART	SET UP & TYPE LETTER AS SITUATION INDICATES ADDRESS ENVELOPE CORRECTLY DECISION PROPER PHRASEOLOGY PROPER TIME AT WHICH TO PERFORM PROCEDURE CUE FINESSE MUST BE USED FAILURE MODE INCORRECT ADDRESS OR AMOUNT	IMPROPER PHRASEOLOGY HAZARD: LOSS OF PATIENT LEGAL IMPLICATIONS
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
WORK INPUT, WORK OUTPUT, FRICTION AND EFFICIENCY IN SIMPLE MACHINES HUMAN RELATIONS		WRITE TO GUARANTOR

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
TYPEWRITER STANDARD OFFICE SUPPLIES FORMS SUPPLIED BY WORKMEN'S COMPENSATION PATIENT CHART PATIENT'S FINANCIAL RECORD	CORRECT INTERPRETATION OF DENTIST'S NOTES FROM CHART ACCURATE LISTING OF PROCEDURES, DISABILITY, AND PROFESSIONAL FEE NOTATION ON PATIENT'S RECORD (COPY IF POSSIBLE) DECISION WHICH FORM IS APPROPRIATE FOR CIRCUMSTANCES CUES WRITTEN AUTHORIZATION FROM PATIENT BE CERTAIN CASE NUMBER IS CORRECT	

SCIENCE	MATH – NUMBER SYSTEMS	COMMUNICATIONS
WORK INPUT, WORK OUTPUT, FRICTION AND EFFICIENCY IN SIMPLE MACHINES	ADDITION AND SUBTACTION OF WHOLE NUMBERS MULTIPLICATION AND DIVISION WITH WHOLE NUMBERS REDUCTION OF FRACTIONS ADDITION AND SUBTRACTION OF PROPER AND IMPROPER FRACTIONS MULTIPLICATION AND DIVISION OF PROPER AND IMPROPER FRACTIONS CHANGING MIXED NUMBERS TO IMPROPER FRACTIONS ADDITION AND SUBTRACTION OF DECIMAL FRACTIONS MULTIPLICATION AND DIVISION OF DECIMAL FRACTIONS	LISTENING TO DENTIST READING NOTES OF DENTIST CORRESPOND WITH COMMISSION DENTAL TERMINOLOGY

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
TYPEWRITER STANDARD OFFICE SUPPLIES FORM FROM PARTICULAR COMPANY INVOLVED PATIENT CHART PATIENT'S FINANCIAL RECORD	CORRECT INTERPRETATION OF DENTIST'S NOTES FROM CHART ACCURATE LISTING OF PROCEDURE AND FEE NOTATION ON PATIENT'S RECORD (COPY IF POSSIBLE) CUES DENTIST'S PREFERENCE CONCERNING ASSIGNMENT OF BENEFITS BE CERTAIN CASE NUMBER IS CORRECT WRITTEN AUTHORIZATION FOR RELEASE OF INFORMATION	
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
WORK INPUT, WORK OUTPUT, FRICTION AND EFFICIENCY IN SIMPLE MACHINES	ADDITION AND SUBTRACTION OF WHOLE NUMBERS	WRITE TO AND SPEAK WITH PATIENT CORRESPOND WITH INSURANCE COMPANY DENTAL TERMINOLOGY

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TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
TYPEWRITER STANDARD OFFICE SUPPLIES FORMS SUPPLIED BY MEDICARE PATIENT CHART PATIENT'S FINANCIAL RECORD	CORRECT INTERPRETATION OF DENTIST'S NOTES FROM CHART ACCURATE LISTING OF PROCEDURE AND FEE NOTATION ON PATIENT'S RECORD (COPY IF POSSIBLE) CUES DENTIST'S PREFERENCE CONCERNING ASSIGNMENT OF BENEFITS BE CERTAIN CASE NUMBER IS CORRECT	
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
WORK INPUT, WORK OUTPUT, FRICTION AND EFFICIENCY IN SIMPLE MACHINES	ADDITION AND SUBTRACTION OF WHOLE NUMBERS	WRITE TO AND SPEAK WITH PATIENT CORRESPOND WITH INSURANCE COMPANY DENTAL TERMINOLOGY

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TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
TYPEWRITER STANDARD OFFICE SUPPLIES FORMS SUPPLIED BY INDIVIDUAL AGENCY PATIENT CHART PATIENT'S FINANCIAL RECORD NOTE: FOLLOW GUIDE LINES OF INDIVIDUAL STATES	CORRECT INTERPRETATION OF DENTIST'S NOTES FROM CHART ACCURATE LISTING OF PROCEDURE AND FEE NOTATION OF PATIENT'S RECORD (COPY IF POSSIBLE) CUES DENTIST'S PREFERENCE CONERNING ASSIGNMENT OF BENEFITS BE CERTAIN CASE NUMBER IS CORRECT	
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
WORK INPUT, WORK OUTPUT, FRICTION AND EFFICIENCY IN SIMPLE MACHINES	ADDITION AND SUBTRACTION OF WHOLE NUMBERS	WRITING–TO PATIENTS AND AGENCIES READING–LETTERS AND FORMS FILLED BY PATIENTS AND AGENCIES SPEAKING BY PHONE OR IN PERSON WITH PATEINTS AND AGENCIES DENTAL TERMINOLOGY

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TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY - HAZARD
STANDARD OFFICE SUPPLIES STOCK BOOK OR CARDS	COUNT AND RECORD DECISION POINT AT WHICH TO REORDER CUES EXCELLENT OPPORTUNITY TO REARRANGE IN PROPER ORDER CLEAN AREA, ETC.	SAFETY: PROPER USE OF AVAILABLE STORAGE FACILITIES HAZARD: DAMAGE TO SUPPLIES TRAUMA TO PERSONNEL
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
	ADDITION AND SUBTRACTION OF WHOLE NUMBERS MULTIPLICATION AND DIVISION WITH WHOLE NUMBERS LOCATE BY APPROXIMATION RATIONAL NUMBERS AND INTEGERS ON THE NUMBER LINE (SEQUENTIAL ORDERING)	RECORD INVENTORY

(TASK STATEMENT) ORDER AND RECEIVE OFFICE SUPPLIES

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
STANDARD OFFICE SUPPLIES STOCK BOOK OR CARDS RECORD OF SUPPLIERS AND COSTS OF SUPPLIES TELEPHONE	APPROPRIATELY AND ACCURATELY PLACE ORDERS INVENTORY AND RECORD ON INVENTORY SHEET OR CARDS STORE IN PROPER AREA DECISION WHAT POINT SUPPLIES WILL BE DEPLETED	
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
WORK INPUT, WORK OUTPUT, FRICTION AND EFFICIENCY IN SIMPLE MACHINES	ADDITION AND SUBTRACTION WITH WHOLE NUMBERS MULTIPLICATION AND DIVISION WITH WHOLE NUMBERS	CORRESPOND AND/OR SPEAK WITH SUPPLIER VERBAL INTERACTION WITH EMPLOYER RECORD TRANSACTIONS

(TASK STATEMENT) COMPLETE INVENTORY OF SUPPLIES (EXPENDABLE)

TOOLS, EQUIPMENT, MATERIALS, OBJECTS ACTED UPON	PERFORMANCE KNOWLEDGE	SAFETY – HAZARD
STANDARD OFFICE SUPPLIES STORAGE AREA WORK STORAGE AREA	OFFICE POLICY ON KEEPING RECORDS COUNT AND RECORD ON NECESSARY CHARTS DECISION TAKE TIME TO REARRANGE ORDER TO CLEAN FAILURE MODE SUPPLY SHORT OR OUT RUSH ORDER FOR RE-ORDER	SAFETY: PROPER USE OF AVAILABLE STORAGE SPACE HAZARD: SUPPLY DAMAGE STRESS PLACED ON PERSONNEL
SCIENCE	**MATH – NUMBER SYSTEMS**	**COMMUNICATIONS**
	ADDITION AND SUBTRACTION OF WHOLE NUMBERS MULTIPLICATION AND DIVISION WITH WHOLE NUMBERS LOCATE BY APPROXIMATION RATIONAL NUMBERS AND INTEGERS ON THE NUMBER LINE (SEQUENTIAL ORDERING)	NON-VERBAL–UNDERSTANDING OFFICE POLICY AS TO METHODS RECORDING INVENTORY